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Educational News and Editorial Comment

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Democracy in School Administration

In recent years much has been written and more said about democracy in school administration. Most of the discussion centers in the part that teachers should play in the process of control and in the ways and means by which teacher co-operation can be made effective in the management of the educational enterprise. Students of public administration and not a few outstanding industrialists are interested in the same problem.

In the conduct of any social enterprise it is necessary to understand the essential elements of the process of control—and these elements in the control process are essentially the same whether the enterprise be the governance of a state, the conduct of a business, or the administration of a school system. If there is to be democratic control, it is absolutely imperative that two principles be recognized and applied.

First, there must be a structure of authority. If there is to be division of labor and specialization in function, there must also be a structure of control. Inherent in the governmental process is the necessity of defining functions and assigning duties to be performed to the various agencies in the governmental hierarchy. The assign-

ment of duties carries with it, by necessary implication, a grant of authority sufficient to accomplish the ends desired. Authority to reach final judgment and to act must be vested in the appropriate agencies all along the line, from the state legislature to the teacher in the classroom. In other words, co-ordination of work and of workers takes place through the establishment of a structure of authority which all must respect.

But there is another principle of equal importance—a principle that is often obscured in practice. It is the principle of leadership, of shared authority, of co-ordination through loyalty to an idea and enthusiasm for a common purpose. Democracy requires that the persons in whose hands authority is placed exercise the authority in such a way as to secure a full measure of co-operation on the part of all who may be affected by it. In the day-by-day administration of any enterprise, efficiency, democracy, and wisdom require that those who possess authority to determine and to carry out policies share this power and this responsibility with those involved in carrying forward the particular enterprise involved.

This principle of shared authority, of co-ordination through the dominance of an ideal, rests in part upon respect for human personality; more fundamentally it rests upon the demand for efficiency. Those who occupy positions in the structure of authority simply cannot fail to capitalize the creative intelligence, the enthusiasm, the loyalty, and the dynamic drive which result when men and women of intelligence and good will understand a program, have a part in formulating it, and join hands in executing it.

These principles of control have a direct bearing on the role of the teacher in the control of education. Failure to apply them in industry has led to no end of difficulty between capital and labor. It would be little less than tragic if school administrators should so fail in their leadership or should be so lacking in inventiveness as to be unable to find means and ways of letting teacher intelligence, good will, co-operation, and enthusiasm filter into the control process at every point. It would be equally tragic if teachers in their necessity, or in their haste, should attempt by organized effort to force an exercise of control. In science, in philosophy, and in control we are beginning to understand the essential meaning of unity, and to intro-

duce division and conflict where co-operation and compromise are intrinsically essential would be to acknowledge defeat.

Trends in Public-School Enrolment

The following significant statement with respect to trends in public-school enrolment is quoted from a recent number of *School Life*, published by the United States Office of Education.

In the six bienniums from 1917–18 to 1928–30, the enrolments increased in both elementary- and secondary-school grades each biennium. This meant a continuous increase in the grand total enrolment in the public elementary- and

TABLE 1

Changes in Public-School Enrolment

Periods	Elementary	High
1918–20	+458,232	+ 266,568
1920–22	+988,291	+ 672,620
1922–24	+532,712	+ 516,869
1924–26	+ 85,072	+ 367,588
1926–28	+284,215	+ 153,813
1928–30	+ 10,376	+ 488,143
1930–32	−143,173	+ 740,599
1932–34	−370,383	+ 529,135
1934–36	−372,476	+ 305,381
1936–38*	−618,950	+ 228,158
1918–38	+853,916	+4,268,874

* Data for 1938 subject to slight change in final checking.

secondary-school system. Since 1929–30 enrolments in the elementary grades have actually decreased each biennium. Enrolments in the high-school grades continued to increase in greater numbers through 1933–34 than the elementary decreased and, therefore, the grand total enrolments for the public elementary and secondary schools continued to increase.

The turning point came between 1934 and 1936, during which biennium the elementary decrease became greater than the high-school increase and grand total enrolments for the public-school system began to drop.

During the biennium 1936–38 these trends continued at an increasing rate, the numerical decrease in elementary enrolments being approximately three times as great as the numerical increase in high-school enrolments, resulting in a decrease in the grand total for elementary and secondary schools of over 390,000 pupils, which is a little less than the total public-school enrolment of the state of Kansas for 1937–38.

In the twenty years from 1918 to 1938, the net increase in enrolments in elementary grades was approximately 854,000 pupils, which is a little less than

the total public-school enrolment in North Carolina in 1937–38. The increase in the same twenty years in the high-school grades was about 4,269,000 pupils, which is a little more than the combined total public-school enrolment in the two states having the most pupils, New York and Pennsylvania, in 1937–38.

Table 1 shows the biennial changes for the twenty-year period ending in 1938.

Needed Reorganization in the Structure of Local Government

In most American states the structure of local government, including counties, townships, and school districts, is seriously in need of reorganization. The local governmental units which we now employ for providing many of our social services had their origins in Colonial and pioneer days. This is especially true of the school district. In the early days in New England when population began to spread out from the central village to other parts of the town, the demand arose to bring the school close to the people. At first the moving school was employed to meet this demand, but later the small-district system was developed. Soon after the Revolutionary War the district system spread southward into New York and later into the western and the southern states. During the nineteenth century, school districts multiplied in great numbers, and the same was true of counties, townships, villages, and cities. In 1931–32 a study of the public administrative service revealed that there were approximately 175,000 governmental units of one kind or another in the United States. Of these, 127,000 were school districts.

In a democracy it is, of course, highly important to maintain in full vigor the spirit of local self-government. To be efficient, however, local self-government must be carried out in governmental units large enough administratively and financially to provide adequate services. Certainly, in many parts of the United States school districts are far too small whether regarded from the point of view of administrative efficiency or of financial support. It has been clearly demonstrated that efficient administrative and supervisory services cannot be maintained in the great majority of the school districts of this country as now organized. It is equally true that a great deal of financial waste is chargeable to our present sys-

tem of district organization. Most important, it is perfectly obvious to anyone familiar with the facts that the small-district type of organization contributes much to inequality of educational opportunity.

No state in the Union illustrates better than Illinois the deficiencies of the small-district system of school organization. The following statement quoted from a recent issue of the *Legislative Committee Bulletin* of the Illinois Education Association describes the situation in Illinois and sets forth a proposal for modifying it.

> The most recent report of the superintendent of public instruction lists, for the school year 1938–39, 5,882 schools enrolling fifteen or less pupils (an increase of 280 schools as compared with the previous year). Of these, 626 enrolled five or less pupils; 2,483 enrolled from six to ten pupils; and 2,779 enrolled from eleven to fifteen pupils. Three thousand one hundred nine schools had ten pupils or fewer in attendance. The great number of school districts (12,015) (an increase of 58 as compared with the previous year) have assessed valuations per pupil varying in the ratio of 470 to 1. Since schools in Illinois depend upon the local taxes for 90 per cent of their support, the tremendous variation in assessed valuations per pupil produces great inequalities in educational opportunity.
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> Obviously there is need for a gradual reorganization of school districts into larger units of administration, support, and attendance. Such reorganization should be achieved by and with the consent of the persons affected. To facilitate this reorganization by democratic means, the I.E.A. advocates the establishment by law of a study committee in each county, elected by the boards of education and boards of school directors, meeting in convention—the committee to study and recommend means of reorganization, to hold public hearings, and to prepare maps of proposed reorganized districts. Actual reorganization would be effected by the present law. This plan has the approval of the Illinois Agricultural Association and other interested groups.

Gandhi's Scheme for Popular Education in India

Everyone who is at all familiar with the course of events in India in recent years knows of the dramatic and inspiring efforts of Mahatma Gandhi to obtain a larger measure of self-government for the masses of his fellow-countrymen. He is also the founder of an extremely significant educational movement—the Wardha scheme of education—which has as its goal the reconstruction of the social and economic life of the Indian people. The following sympathetic account of Gandhi's scheme is quoted from a recent number of the *Journal of Education* published in London.

The central idea of the Wardha scheme is that true education must be given through nonviolence. Mahatma Gandhi's plan of education is impregnated with this creed of nonviolence. This scheme is intended to give birth to a new age from which class and communal hatred is abolished, and exploitation unknown. And this kind of education will be given through crafts. This scheme is not to teach some handicraft side by side with so-called liberal education. The whole education will be imparted through some handicraft or industry. It will be an intellectual training in and through a basic craft by a process of correlation. This means that arithmetic will be learned by the children while counting the number of rounds during the winding of the yarn on the winder—that is, if spinning and weaving are chosen as the basic craft. Addition tables will be learned by placing different objects and arranging them in piles. Subtraction will be done by the same method—that is, counting out the slivers for spinning and those left over after the spinning is finished. Other subjects will be taught by the same method. For instance, the mother-tongue will be taught by naming the various tools used in the craft, describing the different processes of picking, carding, and spinning with the *takli* (a steel instrument used for winding the cotton). This can be used by very small children. While spinning, the children will sing harvest and folk songs. They will also learn the elementary principles of sanitation, hygiene, nutrition, of doing their own work and helping their parents in the home.

This system gives special consideration to primary education. It introduces compulsory education from seven to fourteen years of age. It is also an education that will help one to be self-supporting in later life, and an education which in itself is self-supporting. India is a poor country. Her wealth lies mainly in agriculture and cotton-growing. And, because the handicraft of making cloth is the only one which can be taught throughout the country, Mahatma Gandhi lays emphasis on this craft. Having the natural advantage of raw materials and the enormous man-power for specialization in that industry, her teeming millions will find a solution for unemployment. For centuries India has the tradition for this cotton industry and has been one of the chief manufacturers of cotton fabrics for the world.

A primary education which is self-supporting is open to controversy and misunderstanding. And this idea is one of the fundamentals of this new educational scheme as propounded by Mahatma Gandhi. It is the poverty of India that has made the Mahatma propose this solution so as to bring forth order from the present educational chaos. To introduce free and compulsory education in India it is necessary to find *crores* of rupees to educate her millions of children. According to the Wardha scheme children will be able to earn after the first two years: this money earned with their hands through a craft will be used toward paying the teachers' salaries. Teachers under this scheme will receive from twenty to twenty-five rupees per month. This amount is equivalent to about thirty or forty shillings a month of English money. And most of these teachers are highly qualified. Under this new scheme teachers will be specially

trained for teaching. The course is three years. The selected candidate will not only have to acquire an adequate and practical knowledge of a handicraft, but also the art of correlating various other subjects with the basic craft. The child must learn his craft scientifically, knowing the whys and wherefores of every process.

The Wardha scheme of national education has a close relationship with life. The syllabuses have been planned so that the child may be adjusted to his environment—physical and social, and craftwork. The present system lacks this co-ordination, and the child finds it difficult to adjust himself intelligently and actively to his environment. Inherent in this national scheme is the ideal of citizenship. This aspect of education has been completely ignored in the present system. Citizenship in modern India is destined to become more and more democratic in the social, economic, and political life of the country. And this new education will bring forth a new generation with opportunities of understanding its own problems and rights and obligations. Thus will an intelligent citizen be able to repay in the form of some useful service what he owes to society. This ideal of citizenship is an important feature of the Wardha scheme of education.

Those of us who have been privileged to visit the schools at Wardha, Segaon, and Delhi, and who have watched the scheme in operation, feel that the Wardha method is the only salvation for India's masses. The children are eager about their work, intensely interested in their particular craft, and proud of their finished products. The children sing folk songs while they sit on the floor on mats spinning with their *takli*. They are without fear, and there is a spirit of freedom in the schools. At the training school at Wardha we were able to follow the whole process of cardboard-making, from the making of the paper to designing the finished goods. Whole villages have been revolutionized by this Wardha method of education. The people are regaining their prestige as citizens: they feel they have a niche in life, and they are becoming brave and self-confident by paying for their own education with their own labor. This scheme is a religion in itself—the religion of self-help.

Success is sure. In the words of a prominent educationist in India, "The true development of the mind and the heart can be only through manual labor." This is what the Wardha method is doing. During the next ten years great changes will take place in India because of Mahatma Gandhi's living faith in his vision for the betterment of his people.

The Berkeley Study of the Development of Young Children

In 1928 the Institute of Child Welfare in Berkeley, California, began a study of the physical and mental growth of a group of Berkeley infants. These children have been tested at regular intervals during the succeeding years with the view of gathering the data

necessary for the formulation of "an integrated picture of the growing child, showing the part that each aspect of growth plays in the development of a child's total functioning being." Although the picture is not yet complete and the investigation is still under way, much interest attaches to the results obtained up to this point. These results are reported in a monograph by Nancy Bayley, published by the University of California Press under the title *Studies in the Development of Young Children*. Chapters are devoted to "Home and Family," "Early Illnesses in Children," "Growth in Size," "The Trend of Bone Development," "The Developing Reflex Patterns," "Growth in Intelligence," "Development of Personality," and other aspects of child growth. The following paragraphs are quoted from the chapter on intelligence.

Our experiments with these children marked the first time that anyone had given repeated mental tests to a large number of infants in such a way that their mental development could be traced continuously over a long period of years. In fact, prior to 1920 no large-scale mental-test program had ever been undertaken with infants. People had simply substituted assumptions for exact scientific knowledge. They had found that, when school children were retested after an interval of time, their scores on the second test were very similar to those on the first. From this they concluded that children who appear to be intelligent when they are young will always be intelligent, while dull children are doomed to be dull until the end of their days. Our tests have shown, however, that children do not maintain the same level of intelligence throughout life. Nearly all the children in the study had periods during which their intelligence developed faster or slower than the average. The brightest child in the group at any certain age won this distinction because he had grown rapidly up to that point. He did not hold his position for long, however, as his rate of development always slowed down and another child in the group spurted ahead. The same thing can be said for those children making the poorest scores, with one exception. This one exceptional child, starting life with scores slightly above the group average, gradually fell behind until at six, seven, and eight years of age his mental rating was far below that of any other child in the group. However, at nine years there is some indication that he is catching up a little, though his scores are still very low. At eighteen months and two years of age his scores were so much like those of other children who later improved that it would have been impossible to predict either his decline or the other children's improvement.

From this evidence we must conclude that a young child's intelligence does not grow at a predictable rate. His mental rating does not remain constant and may actually show marked variations over a period of two or three years. And the younger the child, the greater the variations in his mental growth. During

these early years, when mental growth is very rapid, a child's relative position in a group fluctuates more than it does in later years, when growth in all children is much slower. From our tests we have learned a very valuable lesson. We know now that those people were wrong who assumed that they could take a child's score on a mental test and from it successfully predict his future intelligence. Our observations have shown that a mental test's principal value is as a measure of a child's present mental status, and not as a prophecy of future development.

Once we had established the fact that rates of mental growth are variable, we searched for factors which might explain these variations. We checked mental growth against record of past illnesses, ratings of health, measures of physical growth, and ratings of bone maturity—but found no relation between them. We did discover one factor, however, which seems to be related to mental growth. That is the parents' education. After the children were eighteen months old, the correspondence between their intelligence-test scores and the extent of their parents' education definitely increased. It is notable that this increasing correspondence does not show up until the child is old enough to talk. From our data, we cannot be sure whether this increasing correspondence is due to (1) the cumulative effect of better training provided by better educated parents; (2) the increasing similarity between the kinds of intelligence sampled in children's and adults' intelligence tests—the nonverbal intelligence of the early months may be essentially different from the more verbal and abstract intelligence of later years; or (3) delayed biological inheritance from the parents (assuming that the better educated parents are also innately more intelligent). The choice of these possible explanations remains a matter for further research. We can conclude, however, that scores made in mental tests during infancy are of no value in mapping out a child's future career or in selecting children for adoption. Knowledge of the education or intelligence of the child's parents appears to be a better indicator of a child's future abilities.

Court Decisions on Current Issues in Education

Each year the higher courts of this country hand down several hundred decisions dealing with practical problems of school organization and administration. For the past eight years these decisions have been summarized annually in the *Yearbook of School Law* edited by M. M. Chambers and published and distributed by the American Council on Education, Washington, D.C. The latest of these publications (*The Eighth Yearbook*) contains a mass of information of great practical value to school administrators and teachers and of interest to the lay public as well. Chapters are devoted to such matters as the rights of pupils and parents, the employment

and dismissal of teachers, tenure of teachers, and the tort liability of school districts and of the teaching personnel.

Two aspects of teacher tenure are of particular interest and importance. The first of these is the right of school boards to abolish positions of teachers on tenure and thereby to terminate the employment of teachers even though they have tenure status. This problem may be expected to become more acute in the future. Already the declining birth-rate has resulted in a marked falling-off in enrolments at the elementary-school level, and in some communities high-school enrolments appear to have reached a peak. Part of the decrease in enrolment may be taken care of by reducing the class size, but it is also likely that many boards of education will want to reduce the number of teachers. As teacher-tenure statutes are now drafted, they do not afford teachers much protection under such circumstances. The courts have commonly held that legislatures, in enacting teacher-tenure legislation, had no intent to limit in any way the right of school authorities to determine what should be taught or to determine the positions which efficient administration of the school system might demand. Statutes providing for permanent tenure are to be interpreted as "intending only a regulation of dismissal for causes personal to the employee."

"Tenure for Teachers," a chapter prepared for *The Eighth Yearbook of School Law* by Daniel R. Hodgdon, cites some cases involving tenure which were decided by the courts. From this chapter we quote:

> Two school districts in Pennsylvania, because of economy and decrease in number of pupils, consolidated, and a new joint school board was elected. A supervising principal of one of the districts, on tenure, was notified by the new board that his employment was terminated. He claimed that his dismissal was illegal. The court held that where there is a reduction in the number of pupils and where economy is necessary for the general welfare, a teacher, even though under tenure, may be dismissed.
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> A board of education in Pennsylvania abolished all kindergarten classes, in one of which there was a teacher on tenure. She claimed that the dismissal was illegal, but the court held that "when an entire department is lawfully abolished for valid reasons, which may include financial ones, in the interest of a more efficient system, the teachers in that department can be dismissed."
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> A teacher under tenure in Pennsylvania was employed to teach academic subjects for which he was certificated. Because of the great demand for commercial

courses, additional commercial teachers were appointed, and his position was abolished, along with a number of positions of teachers of academic subjects. He claimed tenure and demanded a contract even though there were no pupils to take his courses. The court held that a school board was authorized to terminate a contract of a teacher who had a valid contract when the tenure act became effective, where there was a substantial decrease of students in courses taught by him, which decrease was caused by the establishment of a commercial department in the school, notwithstanding that there was no decrease in the student population as a whole.

A Pennsylvania teacher who had served in a school system for nine years was elected to be a "permanent supply teacher" in 1936. In May, 1938, she was notified by the board that her services were no longer required. No charges were preferred, and no formal hearing was held. Upon appeal, the court found that this teacher's contract was within the tenure act, and that the abolition of the position was wholly for the purpose of dismissing the teacher because she was a nonresident, and that there was no legal ground for discontinuing her employment. The board was ordered to reinstate the teacher.

A teacher under tenure in California was assigned to a position as school librarian. One year later the position was abolished. The teacher was licensed and qualified to teach any of the subjects of a high-school curriculum. At the time of her dismissal, there were twenty-one probationary teachers employed in the system. The court held that when a position is abolished, a person who has acquired a permanent-tenure status as a teacher is entitled to preference over a probationary teacher if the permanent teacher is capable of teaching the subjects taught by the probationary teacher.

Another problem of special interest to many teachers and some school boards has to do with the right of the board of education to dismiss teachers for marriage where the teacher has permanent tenure. Again we quote Dr. Hodgdon:

A teacher under tenure in Louisiana was married in July, 1937. The school board had passed a resolution prior to her marriage which prohibited female teachers who were married from being employed. Acting under the bylaw, the board dismissed the married teacher, who thereupon brought suit for a determination of her rights. The court held that the teacher had been improperly discharged since the board had no power to dismiss teachers for marriage. She was accordingly entitled to be reinstated with salary from the time of her illegal dismissal.

In Wisconsin an efficient female teacher, who had taught the required number of years to gain tenure, married during the school year of 1937–38 and was dismissed May 9, 1938. The court held that a statute providing for permanent tenure of teachers during efficiency and good behavior does not authorize the

discharge of a woman teacher who has served the requisite probationary period nor does it give a board the right to refuse to re-employ her because of marriage.

Another Wisconsin decision holds that under a statute providing for permanent tenure of teachers during efficiency and good behavior, a teacher who had served the requisite probationary period and whose efficiency and good behavior were unquestioned, could not be refused re-employment because of her marriage.

A Guide to the Use of Community Resources in the Elementary School

It is now generally recognized that every community should serve as a laboratory for the work in the social studies conducted both in the elementary school and in the high school. First of all, teachers themselves should know their community, its resources, the essential elements in its economic life, and its main social problems. Teachers require both time and insight to arrive at an understanding of the community, and it is perhaps even more difficult to make the study of the community an integral part of the school program. It is easy, of course, to make trips and excursions, but to lay hold of the understandings appropriate for any particular group of children is by no means simple.

Teachers in the elementary schools everywhere should welcome a bulletin recently published by the Association for Childhood Education under the title *Exploring Your Community*. Planned primarily for the use of teachers of young children, it illustrates concretely how teachers may make use of community resources. The bulletin may be obtained from the association, 1201 Sixteenth Street, Northwest, Washington, D.C. The price is thirty-five cents.

State Organizations of Elementary-School Principals

We have recently received an announcement of the organization of the Illinois Elementary School Principals' Association. It is now affiliated with the Illinois Educational Association. Elementary-school principals are expected to support the association in large numbers because no other organization in the state serves the interests of elementary education as this group is expected to do.

Illinois principals are following the lead of Wisconsin. Some time ago the elementary-school principals of that state formed an association. They now publish an official bulletin, the *Wisconsin Elemen-*

tary School Principal. During the coming summer the association will sponsor an annual conference on elementary education at the University of Wisconsin. It is to be hoped that elementary-school principals in other states where associations have not been formed may profit by the examples of Wisconsin and Illinois.

Two Useful Bibliographies for Teachers

For a number of years the faculty of the Southern Oregon College of Education at Ashland, Oregon, have compiled annually a bibliography of professional books and magazines for elementary-school teachers. The most recent of these bibliographies appears under the title "Elementary Teachers' Professional Library" and contains a well-selected list of books on various topics of interest to elementary-school teachers.

Another helpful bibliography, prepared by the National Recreation Association, is entitled "Bibliography on School Assemblies." It may be obtained from the offices of the association, 315 Fourth Avenue, New York City. The price is ten cents.

Third Annual Conference on Reading

The third annual conference on reading for teachers and school officers in elementary schools, high schools, and junior colleges will be held in Mandel Hall, University of Chicago, June 26–29, inclusive. The central theme of the conference is "Reading and Human Development." The programs for successive half-days of the conference will deal with different aspects of the problem: promoting growth through reading; growth in the interpretation of meaning; development of ability to read effectively for different purposes and to attain different objectives; development of ability to understand what is read in specific curriculums; growth in interests, appreciations, tastes, and emotional maturity; development of basic reading attitudes, habits, and skills; evaluating growth in and through reading; what the library can do to promote growth in and through reading.

Each half-day program will be introduced with a general session and continued in sectional conferences for teachers of the primary grades, the middle grades, and the high school and college. Evening

round tables will relate to problems of interpretation, including the relation of semantics to reading, oral interpretation and choral reading, and the problems of poor readers. The complete program for the conference will appear in the June number of the *Elementary School Journal*.

The conference is open without fee to students registered during the summer quarter. For those not registered a fee of $5.00 will be charged for the conference period or $1.50 a day. To obtain additional information or copies of the program, address William S. Gray, Department of Education, University of Chicago.

Conference of Administrative Officers of Public and Private Schools

The ninth annual conference of administrative officers of public and private schools will be held by the Department of Education of the University of Chicago at Judson Court, College Residence Halls for Men, during the week of July 15–19, 1940. The program in the forenoon will consist of lectures by members of the Department of Education and visiting instructors. Separate round-table discussions for superintendents, high-school principals, and elementary-school principals will be held in the afternoon. Programs of the conference will be mailed to persons applying to Professor William C. Reavis, Department of Education, University of Chicago.

Room and board will be provided, to the extent of the available capacity, in Judson Court for the week, Monday to Friday, for sixteen dollars. Reservations may be made through William J. Mather, Bursar of the University of Chicago.

The conference is open without fee to students registered in the summer quarter and to administrative officers of public and private schools who desire to attend. The general theme of the conference, for which the complete program is given below, is "Evaluating the Work of the School."

Monday, July 15

The Nature and Purposes of Systematic Evaluations

"The Place of Evaluation in Modern Education," Ralph W. Tyler, Professor and Chairman of the Department of Education; Chief Examiner, Board of Examinations, University of Chicago

"Recent Developments in Evaluative Procedures," J. Wayne Wrightstone, Assistant Director, Division of Tests and Measurements, Bureau of Reference, Research, and Statistics, Board of Education of the City of New York

"Outcomes of Systematic Evaluation," John H. Herrick, Director of Research, Shaker Heights City School District, Cleveland, Ohio

Tuesday, July 16

THE EVALUATION OF INSTRUCTIONAL SERVICES

"Characteristics of Effective Instruction," Guy T. Buswell, Professor of Educational Psychology, University of Chicago

"Organization of Instructional Materials for Teaching Purposes," Marion Jordan, Supervisor, Cicero Public Schools, Cicero, Illinois

"Measuring the General Effectiveness of Teachers," DeWitt S. Morgan, Superintendent of Schools, Indianapolis, Indiana

Wednesday, July 17

THE EVALUATION OF ADMINISTRATIVE AND SUPERVISORY SERVICES

"Cost Analysis as a Means of Evaluating the Administrative Program," Nelson B. Henry, Associate Professor of Education, University of Chicago

"Criteria for Evaluating the Effectiveness of Supervision," John B. Whitelaw, Head of the Department of Education, State Normal School, Brockport, New York; Visiting Professor of Education, University of Chicago (Summer, 1940)

"The Self-survey as a Method of Evaluating Administrative and Supervisory Services," William C. Reavis, Professor of Education, University of Chicago

Thursday, July 18

THE EVALUATION OF THE SOCIALIZING FUNCTIONS OF THE MODERN SCHOOL

"The School as an Agency of Social Control and Direction," Newton Edwards, Professor of Education, University of Chicago

"The Socializing Values of Extra-curriculum Activities," Paul E. Elicker, Executive Secretary, National Association of Secondary-School Principals of the National Education Association

"Possible Contributions of the Social Status to Training for Effective Community Life," Henry J. Otto, Educational Consultant, W. K. Kellogg Foundation, Battle Creek, Michigan

Friday, July 19

FORMULATING A COMPREHENSIVE PROGRAM OF EVALUATION FOR A SCHOOL YEAR

"For the General Improvement of Instructional Services," Philip H. Falk, Superintendent of Schools, Madison, Wisconsin

"For the Improvement of Non-instructional Services," Ward G. Reeder, Professor of Education, Ohio State University

"For the Improvement of School and Community Relations," Arthur B. Moehlman, Professor of School Administration and Supervision, University of Michigan

WHO'S WHO FOR MAY

The authors of articles in the current issue HERBERT S. ZIM, head of the Science Department of the Ethical Culture Schools, New York City. SAMUEL TENENBAUM, teacher of economics at Girls' High School, Brooklyn, New York. CARL W. ARETZ, district superintendent of schools at Philadelphia. NELLIE L. GRIFFITHS, professor of education at North Texas State Teachers College, Denton, Texas. GERTRUDE HILDRETH, psychologist of the Lincoln School of Teachers College, Columbia University. CHRISTINE P. INGRAM, assistant director of the Department of Child Study and Special Education of the public schools at Rochester, New York.

The writers of reviews in the current issue I. L. KANDEL, professor of education at Teachers College, Columbia University. E. W. DOLCH, assistant professor of education at the University of Illinois. NELSON B. HENRY, associate professor of education at the University of Chicago. FREDERICK S. BREED, associate professor of education at the University of Chicago. EARL E. KLEINSCHMIDT, M.D., director of the Department of Preventive Medicine, Public Health, and Bacteriology at the Loyola University School of Medicine, Chicago, Illinois. ALLEN R. MOORE, director of natural sciences at Morton High School and Junior College, Cicero, Illinois.

DEVELOPMENT OF A PROGRAM OF ELEMENTARY SCIENCE

HERBERT S. ZIM
Ethical Culture Schools, New York City

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THE PLACE OF ELEMENTARY SCIENCE IN THE SCHOOL

THE program of elementary science is still so new that, despite the work of Craig[1] and others, experimental techniques and curriculums must still be developed to meet the specific requirements of elementary schools. This article gives a report of one effort to develop such a program in the Ethical Culture Schools in New York City during the past ten years.

The Ethical Culture Schools have had a program of elementary science since 1895. The early course, labeled "nature-study," was introduced in the nineties as part of an experimental program. This program of nature-study aimed to bring to the child experiences which would promote social, emotional, and intellectual growth. Strong emphasis was placed on animal life and pets. Learning was made functional through excursions, collecting trips, and farm experiences.

The school population was changing rapidly while this nature-study program evolved. Increased urbanization had its effects on young children, and the growing complexity of their environment brought new interests to the school. Changes within the school curriculum, including increased emphasis on the "here and now" in the social studies, stimulated interest in invention and scientific achievement. Psychologists pointed out children's need for a wider range of manipulative experience in school to compensate for lack of such opportunities in the home. Furthermore, youngsters acquired scientific toys, sets, and games, and brought to school problems and questions arising from these games.

[1] Gerald S. Craig, *Certain Techniques Used in Developing a Course of Study in Science for the Horace Mann Elementary School.* Teachers College Contributions to Education, No. 276. New York: Teachers College, Columbia University, 1927.

These rapidly accelerated changes led to the introduction in 1929 of an experimental program of elementary science. The program was designed to meet the situations created by children's widespread and, often, sophisticated interests. In 1930 a room was converted into a laboratory. Two years later an elementary-science laboratory of special design was included in a new building. After undergoing further testing, the program was extended to both elementary divisions of the Ethical Culture Schools, and refinements are still taking place.

DEVELOPING THE PROGRAM OF SCIENCE

No single technique for developing a program in elementary science met the needs of the Ethical Culture Schools. Intellectual aims in science-teaching were overemphasized in nearly all available programs—a serious fault in a program for young children. Lack of sound opinion on grade placement was apparent. Another reason for tentative procedure was the notable lack of activities in science programs. The function of laboratory work for young children had not been studied. Suggested programs were based on demonstration and observation or on such simple experiments that the conclusions were obvious even to inexperienced children.

The program of elementary science lacked the aid which psychological studies had given to the tool subjects. Nor did science teachers consider children's characteristics. Some programs were unacceptable because of a lack of attention to accepted findings of child psychology. Available programs did not clearly indicate a relation to a philosophy of education. The fact that the Ethical Culture Schools have developed their curriculums around a specific philosophy[1] precluded the use of a plan of elementary science without consideration of its implications for a total plan of education.

The plan of procedure was, therefore, based on slow reconstruction of the science curriculum. The science specialist turned to the situations in the school which offered science possibilities. Experimental programs were introduced; content and methods were tested and modified; current practice was studied; and aid was sought from

[1] Felix Adler, *The Distinctive Aims of the Ethical Culture Schools*. New York: Society for Ethical Culture of New York, 1938. Contains four addresses delivered in 1902.

psychologists and others interested in the total development of the child. Innovations were made as the situations warranted and were retained subject to evaluation and approval by the faculty. Great flexibility characterized this plan of action. Now, after ten years, the science program has reached a point of dynamic equilibrium. Variations which now exist are an inherent part of the program. They include differences due to the varying sizes of classes and location and size of schools.

Since the basic methods of science may apply in totally extraneous situations, the actual subject studied in science may be of less consequence than the ways of procedure. However, educational criteria demand that the science studied be meaningful and significant to the pupils. These two considerations have been borne in mind in selecting the specific content of the science curriculum.

Content has been chosen for study at the class teacher's request. One teacher reported, "My class does not eat well in the lunchroom. I think a study of food would help. Will you consider this in science?" Or another, "The second grade has built an airplane in their room. Could you help them put lights on the wings and the tail?" The specialist, in aiding the groups, took constant care that the activity brought forth basic scientific values in addition to manipulative or factual learning.

Frequently the science work has been related to the social studies —sometimes as a handmaid. Far more often, however, the science specialist and the class teacher find areas of study with implications for both science and social studies. Food, clothing, and shelter are such obvious areas. However, these are not all. One sixth-grade class developed an excellent unit on "Scientific Aids to Navigation" in connection with the study of exploration. A third-grade group collected and refined minerals (copper, iron ore, and clay) from local mines as they studied about "workers" in social studies. These projects, where both the class teacher and the specialist draw from a single source, are often the most successful because the children have a reinforced contact with the subject and have frequent occasion to apply their science in situations outside the laboratory.

The content of the science curriculum is also augmented in relation to other "special" subjects, such as music, art, industrial art,

home arts, or shop. A group of fifth-grade pupils, with the art teacher, worked in the laboratory to make their own paints from earth colors and chemical precipitates. The specialist found this work rich in science experiences. Paints were analyzed and tested. Later, with the paints that they had made in their science work, the pupils painted a mural of an alchemist's laboratory.

Science content is sometimes selected (in proper grades) by voting. This method is satisfactory when the group understands the responsibility of the choice and is able to carry through the task that is chosen. With younger children or with less responsible groups, preferences expressed by the children may be modified by the specialist to meet the maturity of the group. A preference to study "medicine" might be modified into some branch of physiology, or a desire to study radio and television channeled into some related but simpler subject. Certain short studies have been occasioned by current events, such as the burning of the zeppelin "Hindenburg" or the radio scare of a Martian invasion. One experimental program was based on the hobby activities of boys and girls outside school. Science content has also been centered in "school service" or in tasks which classes or clubs have undertaken for the benefit of the school. These included the study which led to the installation of a buzzer system to summon the fourth-grade messenger service and the designing of illuminated signs for the school store.

In brief, the science work has taken its content from a wide variety of sources and has chosen this content for many reasons. The science work may be considered as based on problems, situations, or questions. It is related to the interests and the preferences of pupils.[1] Science has come from problem situations in school, although the problems were not always expressed directly by children but at times required the interpretation of the specialist.

GRADE PLACEMENT OF SCIENCE CONTENT

In relating elementary science to the problems arising from the classroom, the specialist is often confronted with difficult science

[1] An expression of the philosophy of science-teaching to which we subscribe is found in *Science in General Education*. Report of the Committee on the Function of Science in General Education. Commission on Secondary School Curriculum of the Progressive Education Association. New York: D. Appleton–Century Co., Inc., 1938.

questions. The following questions are illustrative of those asked below Grade III in situations where more than a cursory answer was desirable: "Where does helium come from?" "What were the first living things like?" "What makes a motor work?" Some science teachers expressed the opinion that questions such as these could not be answered below the seventh-grade level and that in lower grades the attention of children should be directed toward simpler things. Since this advice seemed contrary to the philosophy of our science program, a small experiment was set up to test the extent to which young children could assimilate and use detailed information obtained in response to questions.

"What makes a motor work?" a second-grade question, was selected for the experiment. Around this question was devised a unit of work involving many experiments, which are usually performed in junior high school science, and requiring advanced concepts and vocabulary. The specialist and the class teacher worked together until, through experience, the group achieved a logical explanation of the gasoline motor. At the same time the teacher and the specialist wanted to know the extent to which the information and the experiences were accepted and used by the children. A careful record was made of every discussion and laboratory experiment so that the class teacher would be aware of sources of science information. During the day all incidents and children's remarks involving science experience were recorded by the class teacher. This record included the voluntary references to motors or to specific concepts about them made by the children while playing with their airplanes, etc. In addition, the co-operation of parents was secured in recording incidents and anecdotes from the home.

At each science period the children drew pictures of the experiment or some part of it. These pictures (drawn in five to ten minutes) were stored for two weeks and then returned to the pupils. Each pupil was asked to tell the class what his drawing illustrated. A record of these picture interpretations was kept. A simple true-false test was developed with each set of science experiences. A story about the experiments was told, and the children wrote "yes" or "no" about parts which were or were not true. They were asked to draw a line if they were uncertain. Since this group had just

mastered simple writing, they enjoyed the experience and soon learned the technique of the test. Seven such tests showed a good grasp of the facts.

This small group studied motors in ten laboratory periods and discussions. The experiment was not publicly reported because of the size of the group and the inadequacy of the home reports. Both the tests and the picture interpretation proved to be promising techniques. Anecdotes were highly significant, but too few parents responded. The following anecdote, relating to the early experiments on burning, illustrates the children's application of this learning experience.

During dinner Alan suddenly asked, "Mother, do you know the name of the metal that burns?" [Magnesium.]

MOTHER: "Never heard of it. Where did you hear of it?"

ALAN: "Our teacher burned some for us in science. It burns with a very bright light."

MOTHER: "Does that prove anything?"

ALAN: "Yes. It proves that fire can give light and heat too. If we should fill our fireplace full of this metal and burn it, it would make us warm, and we wouldn't need to turn on any light because the room would be all light enough to read by."

Anecdotes such as this and the other data suggested that even young children could assimilate and use a wide variety of science information. To answer the question of grade placement, the class teachers and the specialist have agreed that attempts should be made to develop answers to group questions at any grade level under the following conditions: (1) when questions come from an important group activity and are an integral part in the development of the activity; (2) when information can be brought out by means of simple, concrete experiences in the class and the laboratory; (3) when there will be related situations in and out of school in which these experiences may serve to guide the child's activity.

These criteria have guided the specialist to a wide range of experiences for elementary children. Some questions which primary classes have successfully explored in science include:

Kindergarten

How do the doors of the Pennsylvania Station open? [An electric-eye device.]

Grade I

How can we build a pneumatic tube like the post office?
Can we put up electric lights and a bell in our playhouse?

Grade II

How does a captain know how to steer his ship?
Why must we drink milk at lunch?
How are babies born?

In the upper grades the problems cover an even wider range and are increasingly difficult.

METHODS OF SCIENCE-TEACHING

Whatever the source of content, class work in nearly all grades has proceeded through planning with the children. The extent of this planning has varied with the age and the nature of the group and the type of problem studied. As one phase of planning, the science specialist has made definite effort to rephrase questions and problems into experimental situations and in other ways to elicit suggestions for activities. The aim has been to have the group engage in individual laboratory work whenever possible.

Stress is placed on individual laboratory work because of specific values expected from it. First, it permits each pupil to engage in the manipulative activity important for muscular control and co-ordination. Second, it provides the most personal application of learning by doing. Third, it enables the teacher to give individual help to those pupils who need it most and to permit others to work at their own rate of speed. Fourth, it provides strong psychological motivation for continued interest: personal success with ego satisfaction, competition with materials in a problem situation, discovery and invention. The individual work permits a wide range of sensory perception and enables the child to see, hear, feel, and sometimes smell and taste the things with which he is working.

This emphasis does not mean that each child works alone at a given task. Here, too, variability has been developed in the program. On some occasions all pupils perform the same experiment. At other times the group works in pairs or in "committees." Frequently the members of the entire class do not perform the same experiment. Variation is constantly introduced as a basis for comparisons and for better understanding.

The development of individual laboratory techniques in the elementary grades has been a major task. The delicate adjustment between freedom and safety in the laboratory has had to be carefully watched. Faith in the children is important, and this faith is well founded, since the safety record has been most satisfactory.

The program emphasizes individual laboratory work based on problem situations. This emphasis has necessitated the introduction of scientific techniques at levels which have differed greatly from the traditional levels. Elementary science need not limit its scope because the use of microscopes, Bunsen burners, chemicals, or balances has heretofore been confined to the secondary school or college laboratory. Eight-year-old children can use Bunsen burners and can work successfully in experiments requiring heat. Six-year-old pupils can connect batteries to lights and bells. Eight-year-old children can set up telegraphs, and pupils two years older can connect telephones and experiment with crystal radio sets. Chemicals differ widely in their nature. Enough safe kinds exist to permit chemical experimentation in elementary science. Seven-year-old pupils can do simple chemical experiments, while eight-year-olds can test for nutrients and do similar work. Fifth-grade pupils (ten years of age) can prepare oxygen, chlorine, hydrogen, or make invisible inks. Small microscopes, magnifying seventy-five diameters, are constantly used in Grades IV, V, and VI. Instruments for weighing and measuring are used by all children over seven. Arithmetic takes on increased meaning when it becomes important for weighing rats or measuring the amount of water needed to make a chemical garden.

In the laboratory we have made excellent use of model steam engines, electric trains, motors, and airplanes. We have also used a great variety of animal life. There are at least six or eight kinds of animals constantly available for study or experiment, and during the spring there are often many more. Growing plants are always kept on hand. Primary children often plant seeds and bulbs as part of their science experiences.

While individual laboratory work is the basic method of teaching, we have not dispensed with demonstrations. There are times when a demonstration lesson is preferable to individual laboratory work. This demonstration may be conducted by the specialist with the assistance of pupils. A good way to introduce new pupils, lacking

confidence in the handling of laboratory materials, is to use them as assistants in such demonstrations. A pupil may also give a demonstration in the classroom to which another class is invited, or at an assembly, or may prepare an exhibit in the halls. Such demonstrations entail preparation of charts, maps, pictures, raw materials, collections, or experiments. Here the speech and art teachers help the class in developing a good presentation.

Through laboratory work and group studies in elementary science, the attempt is made to develop in pupils certain basic ways of thinking and acting. In addition, the study of science performs other concomitant functions, which have educational value. The function of service to the school is one of these. An outstanding characteristic of science is its contribution to human welfare. Yet children have little opportunity to become aware of the services that science performs. Learning that electricity furnishes light and power is not enough because no problem for the child is involved. The service must come from a situation in which the children are involved. It must produce results which they recognize. Fortunately there is ample opportunity for such service in the elementary school. One fourth-grade group studying sound was able to diagnose the causes of excess noise in the dining-room. They secured the co-operation of the school, through an assembly and exhibits, and influenced the administration in having the room acoustically treated. With a foot-candle meter another group made a survey of light in the classrooms. They found two situations where the lighting was insufficient, and these were corrected.

Service has not been limited to this particular type of "trouble shooting." A flower club of fourth-grade girls assists teachers in caring for plants in the school. They start bulbs for classroom use, apply chemical fertilizers, wash and repot plants. A pet club stimulated interest in pets, which were sold at cost to the children. With each sale detailed instructions for care of the pet were given, and sales carried a replacement guaranty. Representatives of the club spoke to classes and ran a library of books about animals and pets. A group of sixth-grade pupils with an interest in photography took over the responsibility for school pictures. They photographed festivals, plays, and classroom activities. Prints, sold at cost, paid for their materials.

Other aspects of service are possible. A group interested in radio might arrange to set up receivers in the classroom for educational programs. Others might take charge of moving-picture and projecting machines. Through science activities a group might undertake an investigation of traffic in the halls, sanitation in the washrooms, or other problems where pupil co-operation is necessary. When these service activities are genuine tasks which children recognize and accept, the science work takes on values that it cannot ordinarily achieve in the classroom.

SEX EDUCATION

The program of science does not set sex education apart as a separate area of instruction. Children often ask questions about growth, reproduction, nutrition, death, and other physiological activities. These questions may warrant study by the class or perhaps only a discussion with a few individuals. No attempt is made to segregate questions about sex from any other questions which science can help answer. Typical children's questions in this sphere include: (1) "How is a baby born?" (2) "What makes twins?" (3) "What is the difference between boys and girls?" (4) "How can you tell when a rat is going to have a baby?" (5) "Why are children like [or unlike] their parents?" (6) "What happens when a person dies?"

In the elementary school, activities with animals may form an adequate basis for factual answers to questions. Many litters of rats are born in the schools every year. Children have also seen rabbits, guinea pigs, fish, and frogs reproduce. They have seen animals die of various causes. In some situations a pregnant rat is sent to be cared for in the classroom. The class teacher answers questions and directs the observation of the pupils. In the primary grades it seems preferable that the class teacher take this responsibility. With other groups the specialist may be called in to discuss the questions with the class or have conferences with smaller groups. In the laboratory, books on physiology are available to all pupils. We have found most anatomical charts so detailed as to confuse pupils. Simple homemade diagrams of body organs and processes are quite satisfactory.

In the upper elementary grades we are prepared for more ad-

vanced questions on heredity, disease, growth, and reproduction. Discussion must be frank and serious. All questions presented by the children should be answered by the teacher or by the school physician. At this level we open incubated eggs and may occasionally make use of the dissection of a frog or rat, but we proceed cautiously, as we realize that this procedure may be disturbing to an emotionally immature child. Interest in growth and development is strong in Grade V and stronger in Grade VI. For this reason nearly every group engages in a study of some phase of physiology for periods during these years.

The science department has never assumed that supplying information about reproduction was solving sex problems of boys and girls. We realize that information may play only a small role in securing adequate adjustment. Interest in sex may find expression in art work and in writing, as well as science. We have observed how work in art, for example, may supplement information acquired in science. Of basic importance is the co-operation of the entire faculty in giving the child security and assistance in facing *all* problems in the school situation.

SCIENCE FOR THE INTERESTED CHILD

Early in the development of the science program it became clear that group work was not sufficient. Despite flexibility and individual attention, this program did not satisfy boys and girls who were actively interested in science. We have since discovered[1] that many boys and girls who are actively interested in science during their adolescence became interested between the ages of ten and twelve. This fact implies that attention should be given to fifth- and sixth-grade children who profess an interest in science. At first (in 1931) a free period was provided once a week when interested pupils met to work on topics of their choosing. At present there are richer possibilities for the interested pupil, who may use the laboratory several times weekly.

This individual science work is of special value to the boy or girl who has read widely in science or who has had advanced experiences because of home activities with scientific sets and toys. These children are extremely interested. They often work out difficult experi-

[1] Herbert S. Zim, *Science Interests and Activities of Adolescents* (forthcoming publication).

ments and show unusual creativeness in their own "inventions." In addition, there are therapeutic values in elementary science, which are being explored and used in the Ethical Culture Schools. With the guidance of psychologists these seem to have definite value.

Sometimes a group of pupils with similar interests form a club and aid one another's progress. The photography club built a darkroom—a task too ambitious for an individual. An airplane group was able to visit flying fields and factories where individuals could not have gained entry. In one of the schools the club activities were formalized into a "guild" pattern, and the children drew up rules of guild conduct and workmanship. In most cases the club or group organization offers distinct advantages for sixth-grade and often for fifth-grade pupils. In Grades III and IV, and sometimes in Grade V, the pupils seem to work better in the "optional" periods, where each child tackles his own problem.

EVALUATION OF PUPIL PROGRESS

The program has developed slowly and has indicated the values to be derived from group and individual activities. The latter may be considered more fundamental since the value of science must ultimately be determined by the changes it produces in the behavior of the individual. To assay these changes has involved the use of new techniques. At first this evaluation in elementary science was a subjective process. The specialist wrote a short "character" report about each pupil. This method was unsatisfactory because the report did not focus attention on specific progress but often led to vague general statements. In connection with the study of content, the use of anecdotal records was started. This method had definite possibilities in evaluation and is still being used. Clear instances illustrating particular behavior are felt to be more pertinent than general statements.

Occasionally in Grade VI we tried standard tests, such as Powers' General Science Test and Noll's "What Do You Think?" There has been some use of true-false tests in Grades II and III. Essay-type questions have been employed in Grades V and VI, but they have been restricted to specific situations. The picture interpretation, mentioned above as having been used in Grade II, has also been employed in Grade I. This method offers an additional means of

evaluation at the primary level. Recently an experimental test based on free association has been tried in Grades V and VI. The results have been gratifying and suggest the possibility of using this technique in evaluating progress.

Another recent attempt at evaluation has been the use of controlled interviews with all pupils in Grades IV, V, and VI. Pupils in these grades were asked to fill out a short questionnaire dealing with activities, preferences, pets, vocational choices, etc. These questionnaires were used as a basis for an interview, in which pupils spoke frankly and seriously. Immediately after each interview a record was made on mimeographed sheets, which included a section for an abridged description of pupil behavior. This description was made in terms of five traits selected for their significance in science education: (1) dependability or responsibility, (2) manipulative ability, (3) interest, (4) open-mindedness, and (5) experimental attitude.

All the data pertaining to a pupil's activities in elementary science have been gathered into a cumulative folder, which will eventually contain the pupil's science record from kindergarten through Grade VI. At present, in the second year of the use of the cumulative record, we are working on Grades III through VI. In the folder are placed all written papers of pupils, questionnaires, rating sheets, anecdotal records, carbon copies of school reports, and any other data pertaining to the pupil's growth in science. This folder will be of even greater value in years to come when a cumulative record of four, five, or six years will be available. It is hoped that by then these folders will yield data on the development and the significance of science interests and activities in the elementary school.

FURTHER PROBLEMS

There are many problems which have not as yet been clarified by study or trial, including sex differences in interests and activities and the education of class teachers to an awareness of children's interests and problems. Improved techniques of co-operation with the specialist are needed. The search for better methods of evaluation has already been mentioned. Grade placement is still a problem. Parent relationships are important, particularly for pupils interested in science. The entire role of scientific games and home devices needs attention. These, in brief, are some of our problems.

UNCONTROLLED EXPRESSIONS OF CHILDREN'S ATTITUDES TOWARD SCHOOL

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THE PROBLEM

THE purpose of the investigation was to discover the attitudes toward school expressed by sixth- and seventh-grade children. This group was chosen because they appeared better suited for this type of study than children in higher or lower grades. Younger children, it was thought, might not be sufficiently fluent or literate to express their opinions; the opinions of children in the next higher grade (Grade VIII) might be colored by their approaching graduation; and children in high school are not as representative a sample of the school population, and, furthermore, their views are likely to be colored by social and vocational objectives. Hence the grades finally chosen, it was thought, represented a midstream group of such nature as to give a true reflection of school attitudes, uninfluenced and untainted by extraneous considerations.

PROCEDURE

The investigation was confined to 639 children in three New York City elementary schools located in varying neighborhoods. One school was located in a superior residential section, another in an average to middling section, and a third in a poor neighborhood. Because of the variety of neighborhoods, the sampling can be said to be as representative as could be obtained with the limited means at the disposal of the average investigation, particularly in view of the huge school population in New York City.

The children were asked to answer the following question.

Imagine your best friend asked you, "Do you like school?" What would you answer? Write it down just as you would say it to him. Don't worry about spelling, English, or anything else. Write it down, just as if your were speaking. Say just what you think about school. If you like school, say why. If you don't

like school, say why. If you do not have enough room, use the back of this paper.[1]

The answers to this question, since they represent the uncontrolled and spontaneous expression of the children, would provide, it was thought, insight into the children's attitudes which could be obtained in no other way. The children answered the question anonymously, away from the presence of teachers and supervisors, in order that maximum honesty might be assured.

To list all the responses of the children who participated in the study would make interpretation difficult, if not impossible. For this

TABLE 1

DISTRIBUTION OF RESPONSES OF 290 BOYS AND 290 GIRLS TO QUESTION WHETHER THEY LIKED SCHOOL

Response	Boys		Girls		Both	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Like school	141	48.6	200	69.0	341	58.8
Dislike school	69	23.8	30	10.3	99	17.1
Mixed emotions	80	27.6	60	20.7	140	24.1
Total	290	100.0	290	100.0	580	100.0

reason the following procedure, approximating some sort of statistical approach, was used. The responses were divided into three categories: (1) responses which indicated overwhelmingly favorable attitudes, (2) responses which indicated overwhelmingly unfavorable attitudes, and (3) responses which indicated mixed emotions and feelings. The number and percentage of responses falling in each of these categories are shown in Table 1. The pupils in the third group like some things about school and dislike others. Some of these children said that they would like school if certain changes were made. The best way to describe their attitude is to say that sometimes they like school and sometimes they do not. Typical responses made by this group follow. The language, wherever possible, follows the style

[1] This is the last item of the investigator's School Attitude Questionnaire Test. The test is described in the writer's article, "A Test To Measure a Child's Attitude toward School, Teachers, and Classmates," *Educational Administration and Supervision* (forthcoming number).

and the sentence structure of the child's own statement. The exact words could not be given, for the children's responses were often long and involved and contained extraneous material which had nothing to do with this study. However, the gist of the ideas was extracted, and the attitude of the original response was retained.

Sometimes it's all right, but at other times I hate it because my teacher gets cranky.

Sometimes I like it and sometimes I hate it.

It's all right if I have a nice teacher.

I like school sometimes. I hate to get up.

I'd like school if the hours were shorter and if the teachers were good.

Sometimes I like school when I have a lot of fun. Sometimes I feel disgusted and I feel like staying home. But I must like it because I go there.

Such responses are classified in Table 1 under the heading, "Mixed emotions."

STATISTICAL TABULATION OF RESPONSES

A reading of the responses revealed that they fell, for the most part, into set patterns. The same reasons for liking or disliking school appeared time and time again. Some examples follow.

I like school because it gives you an education.

I like school because I learn many things. These things will be of much help when I work.

I don't like school. I'd rather be home helping my mother or go to work.

School is terrible and I wish I didn't have to go because the teacher is strict and makes you write things 100 times.

At times a child reacted to the question with strong sentiment. Such a response, however, was not typical but rare. Two such emotional outbursts follow.

I despise school so much that I'd rather be dead than go to school. I'd do the hardest work there is, than go to school.

I think school is the most important place in the world and I would rather be in school than any other place. As for my teacher, Mrs. ———, I think she's grand. I don't think I would want to be in any other place but school. It does help me a lot. I wouldn't care if I had $20,000,000, I would still hold to my education.

In instances where the responses followed conventional patterns (and, as previously stated, the great majority of cases did so), the reasons for liking or disliking school were tabulated. From the outset it should be understood that a child did not always give one reason for liking or disliking school. Some children gave one reason; some, two; and some, three or more. Sometimes a child would state a tabulated reason and also a reason which was so individual and isolated that it could not be tabulated. At other times a child's response was so individual that it resembled no other response, and some children did not answer the question at all. Wherever possible, the reasons were tabulated so as to allow for statistical analysis.

GROUPED RESPONSES

An examination of the reasons stated for liking and disliking school discloses that some of the reasons are very similar. For instance, the first three reasons shown in Table 2, which deal with school as an educational institution, although worded somewhat differently, have much in common. They have been separately listed, but provision is made for totaling the frequency of these responses. Reasons 4, 5, 6, and 7 deal with school as a preparation for the workaday world, and these also have been grouped together. The same applies to reasons 8 and 9, which deal with favorable attitudes toward the teacher; to numbers 10 and 11, which deal with school as a place of interest and amusement; and to reasons 21, 22, 23, and 24, which deal with unfavorable attitudes toward the teacher.

ANALYSIS OF DATA

Children take serious attitude toward school.—Examination of Table 2 reveals that children regard school in a serious and an earnest light. School stands for education, and children believe that this education will help them get ahead in the world—vocationally, socially, and otherwise.

Despite the statements of the modernists and the followers of Dewey, the great majority of children do not appear to evaluate school in terms of immediate interests. "Fun" and "enjoyable" in connection with school were mentioned fourteen times by the boys and twenty-eight times by the girls. However, "getting an educa-

TABLE 2

REASONS OFFERED FOR LIKING OR DISLIKING SCHOOL

RESPONSE	FREQUENCY OF MENTION		
	Boys	Girls	Both
Responses indicating liking:			
1. I get an education	19	28	47
2. I learn things	33	59	92
3. It makes me smart	9	13	22
Subtotal	61	100	161
4. Helps me get a job	12	19	31
5. Will help you out in the world	11	19	30
6. School will help you when you are older	2	5	7
7. Help me make a lot of money	1	.....	1
Subtotal	26	43	69
8. I like the teachers	17	40	57
9. Teachers are good	1	9	10
Subtotal	18	49	67
10. You have fun	10	19	29
11. School is interesting and enjoyable	4	9	13
Subtotal	14	28	42
12. I like the fellows at school	1	11	12
13. I like school	39	43	82
14. It's all right	18	13	31
Total	177	287	464
Responses indicating dislike:*			
21. Teachers are too strict	3	.....	3
22. Teachers are insulting	3	1	4
23. Teachers are unfriendly	3	1	4
24. Teachers are bad	7	3	10
Subtotal	16	5	21
25. I don't like school	29	8	37
26. The work is too hard	6	4	10
27. The classmates are disagreeable	1	1	2
28. The monitors are unfair	1	1	2
29. The hours are too long	10	4	14

* It is to be noted that the last item under the classification indicating liking for school ends with 14. The classification for dislike begins with 21. The reason for using another decade was that it was thought this scheme would differentiate the two groups more sharply and distinctly.

TABLE 2—*Continued*

Response	Frequency of Mention		
	Boys	Girls	Both
Responses indicating dislike (*continued*):			
30. I don't like to get up in the morning	1	3	4
31. I don't like the subject matter	3	3	6
32. I'd rather work	5	3	8
33. I'm too old for the class	1	4	5
34. We get too much home work	5	.....	5
Total	78	36	114

tion" and "learning things" were mentioned sixty-one times by the boys and a hundred times by the girls. The fact that education will prove helpful in making money and getting on in the world was mentioned twenty-six times by the boys and forty-three times by the girls.

The study reveals the seriousness of children excepting in infrequent instances. They do not look at school as a place of joy or pleasure. There is no exuberant enthusiasm displayed. There is no zestful approach to the school situation. The children attend school with consciousness that it will help them out in later life. School is not pleasurable for itself. It is important for its future promise.

Children think in adult terms.—The data also indicate how quickly children learn to think in adult terms. If it were stated that parents had given the reasons for favoring education that are shown in the table, there would be no surprise, no pause to say, "How childish or infantile!" The reasons that the children offered were mostly of an adult type and displayed adult thinking and feeling. As one child naïvely put it: "I like it [school] a little bit. If I didn't go to school, I would be a garbageman. I want to be a boss and be paid well without doing much work." The child may have been blunt in the way he expressed his thoughts, but the statement probably revealed, with honesty and sincerity, his attitude toward education. Another child wrote: "I like school sometimes when teacher doesn't holler. However, I must get an education because I want to be a C.P.A."

The adult character of the responses suggests that the school is an

instrument of the community, playing its assigned role in the community, and that the children attending this institution assign to it the same reasons for existence that the community does. Hence one can infer that the school is a means, not an end in itself, and that it performs a function assigned to it by the community. Instead of creating attitudes, the school is the recipient of attitudes.

Girls are more favorable toward school than are boys.—The free expression of opinion shows that girls are more favorable in their attitude toward school than boys. Table 1 shows that 141 boys and 200 girls expressed favorable attitudes toward school, and that 69 boys and only 30 girls expressed "dislike."

The girls showed a greater liking for their teachers than did the boys. The teacher was mentioned by the entire group sixty-seven times in connection with favorable school attitudes. Of this number, the girls mentioned the teacher forty-nine times, the boys only eighteen times. Girls appear more serious in their approach to school. The girls mentioned education and learning in connection with school one hundred times, the boys only sixty-one times. Even when it comes to practical considerations, the help that education will give in obtaining a job and getting on in the world, the girls stand out ahead of the boys. The girls appear to have more fun in school, as evidenced by the fact that twenty-eight girls mentioned this reason for liking school, while only fourteen boys did so. Eleven girls and only one boy mentioned classmates as adding to the pleasure of school.

These findings are in conformity with the data resulting from responses to the entire School Attitude Questionnaire Test. The girls responded in a fashion to indicate more favorable attitudes toward the school situation than did the boys. The findings again suggest the possibility that the school is better adapted for girls than for boys or that girls are more conventional and conservative and less given to rebellion than boys.

The teacher is important in creation of attitudes.—An important factor, but less important than the foregoing factors, is the teacher as a determiner of children's attitudes toward school. The children who disliked school mentioned the teacher as the cause of dislike more frequently than they mentioned any other factor. This result

agrees with the findings of Terman,[1] whose group also mentioned the teacher most frequently as the reason for disliking school. Any number of responses can be cited to show how important a role the teacher plays in the creation of attitudes. Several responses follow.

I like the teacher I have now. I like school when the teacher is not strict.

I don't like school because the present teacher is mean.

I like the teacher I have now, but teachers are strict.

When teachers are nice, I like school. When teachers are bad, I hate it and it seems forever until I get out.

The only trouble is that some teachers do not understand us children. There are many mistook words which end up in tears. The teachers do not realize that they were once children themselves. Therefore, they have become hard and stern. And while there are children who deserve scolding and get it, while the good ones have to suffer if they do something once.

Other factors in the school situation which create favorable or unfavorable attitudes are impersonal and difficult to change. The teacher is the most flexible and the most easily changed element in the school situation. This study suggests that the teacher plays a vital and crucial role in creating favorable and unfavorable attitudes and that the relation between the teacher and the child appears at times to be anything but cordial.

Other causes for dislike of school.—The next most frequent source of complaint is that the hours are too long. For children who admit hating school, this response is understandable. Occasionally a pathetic note was struck in the answers. The most moving type of complaint came from the over-age children. When the data are listed in a statistical tabulation, the unhappiness of these children does not show up in its true poignancy. For instance, one child wrote: "I don't like school because the children in my class are much smaller than I am. I want to go to school to graduate but I feel gorky next to the other boys and girls." Another child wrote: "I don't like school because I'm old and in a low grade and I feel funny to sit with young children." Retarding a child presents, it would appear, not only an educational problem but one that also involves attitudes.

[1] Lewis M. Terman, *Mental and Physical Traits of a Thousand Gifted Children*, p. 269. Genetic Studies of Genius, Vol. I. Stanford University, California: Stanford University Press, 1925.

Children are not critical of school.—The children's faith in the school and all that it represents is sometimes ludicrous. The child assumes that the school educates him, even if the evidence indicates that he has not gained any benefit from the kind of instruction which is generally expected of the school. A seventh-grade child wrote: "Yes, I like it Because you learn a good education and when you get out you could get a job." Another seventh-grade pupil wrote: "I like school because you lern a lot and at P.T. you get a lot execise." These two responses are given verbatim.

CONCLUSION

The school, this study suggests, is an institution—a product of the community—serving the needs of the community. The children making use of its facilities regard the school in the same way as do the adults in the community. This study suggests the possibility that the community and not the school creates attitudes concerning the school.

ADMINISTRATION OF A PROGRAM OF CONTINUOUS PUPIL PROGRESS

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PERHAPS the most important factor in developing a program of continuous pupil progress is the freedom of the teacher to plan his own program within certain well-defined but rather broad limits. The administrators of most large city school systems in America have been guilty of preaching an activity philosophy—a philosophy built on learning through experience—and then imposing administrative and supervisory arrangements that reduce this philosophy to little more than so many pages in a book on modern education. They exhort their teachers to recognize individual differences and to democratize procedures. At the same time they require the teachers to instruct large classes, to group their pupils into grades, to present elaborately detailed content specified for those grades, to test progress in the light of standards of achievement for graded courses of study, to compartmentalize the program on a subject basis with so many minutes allotted to each subject, and to promote once or twice a year the pupils who have made the hurdles of a grade. Under conditions of this sort, though it may not be impossible for a teacher to develop a program of continuous pupil progress, certainly it is difficult. The writer's contention is that, within certain broad limitations defined by social demands, teachers must be free to develop cooperatively a program which will provide for the uninterrupted growth of their pupils. This point of view represents democratic school administration. Furthermore, it assumes a school personnel prepared to accept the responsibilities that are implied.

During the past few years there has been a marked tendency in Philadelphia public schools toward wider latitude in interpretation, especially in the adaptation of courses of study to local conditions. Schools are also encouraged to make such modifications as are neces-

sary in the development of a program of continuous pupil progress. This new attitude on the part of the department of superintendence offers great opportunities for initiative in school organization, curriculum construction, and teaching procedure. This freedom implies the necessity for a correspondingly keen awareness of responsibilities. Freedom to interpret, to adapt, to modify, or to create is justified only insofar as it contributes ultimately to the growth of the children.

It is a thrilling adventure to be a part of an educational movement in which democracy is not merely a process of thinking and talking but a program by which we live and on which we act. In District Six of Philadelphia numerous meetings of teachers, supervisors, and principals have been held for the discussion of methods of adapting and modifying the curriculum to develop a program of continuous pupil progress. Studies have been made of current educational literature. Observations have been made in schools that are pioneering in modern practices. Descriptions of experiments have been presented and carefully analyzed. Professors from local universities have been called on to present their views on the curriculum. Groups of principals and teachers have been working together in a consideration of organization changes that might be made. A unifying purpose has been evolved. Basic principles have been well established, and individual schools have been encouraged to make their own applications. The response to this new challenge speaks well for the professional integrity and progress of our teachers.

Marked differences in the programs of schools have resulted from various community conditions. Promotions, excepting as required in paper reports, have given way to placement and organization as part of our program of continuous pupil progress. Grade, for all practical purposes, has become synonymous with school age. Emphasis has been placed on group work and different ways of classifying pupils. Courses of study and time allotments are viewed as guides. Modifications proposed for the pupils' progress records are receiving consideration. Experiments of different kinds are being tried and carefully observed. Diagnostic and remedial teaching is resulting in the development of all kinds of self-teaching, self-directing, and self-checking arrangements. Individualization of instruction is recog-

nized as the base of a program of continuous pupil progress. Informality in classroom procedure is becoming more prevalent. The entire administrative setup is more flexible.

Arrangements have been made to meet with parents and community groups. Not only do we need to have the parents familiar with our thinking, but we need to have the benefit of their thinking. The way is not really democratic unless the parents to whom the children belong are, somehow or other, made participants in matters of vital concern in the growth of their children. The day has passed when the public school simply tells the parents what it proposes to do with their children. Parents have a right not only to know what is being done but also to contribute their point of view.

Tremendous problems lie ahead in any project with such significant implications. The easiest part of freedom is the actual declaration of liberty. There is always the possibility of the improper use of privileges, the failure to comprehend objectives, or the misinterpretation of procedures. This freedom does not mean that a teacher in a public school may teach whatever and however he pleases. His freedom is wrapped round with responsibilities to the children, to the parents, to his associates, to the community, to all that is known in education about child welfare, to the social and spiritual heritage of America, and to those ideals which ever point the way for individual growth and social progress. Teachers see clearly that no responsibility is greater than that which comes with freedom.

When individuals become aware of the responsibilities that accompany their freedom, they appreciate the necessity for co-operation. As a result the emphasis in administration shifts from co-operative supervision to co-operative teaching, from rating teachers to working together, from teacher growth as a direct approach to teacher growth as incidental to the improvement of learning conditions for the children. This transition has been a conspicuous outcome of our attitude of liberalization. Our attention is no longer directed toward a teacher to be improved but rather toward a problem to be solved. In other words, we are all engaged in a project which is of real consequence for our pupils. Together we are seeking solutions to the many problems that have arisen. Through pooling our resources we have discovered the answers to a few.

Some of the questions that have arisen deal with the matter of 100 per cent promotion. Schools that are developing a program of continuous pupil progress have changed their interpretation of promotion to mean reclassification or placement. Actually they do not think in terms of promotion. It is, therefore, an anachronism to speak of a percentage of promotion. This change may be confusing to parents and teachers who are accustomed to promotion as an indication that the child has acquired certain facts, knowledge, and skills taught in a particular grade. In a program of continuous pupil progress, each child is given opportunities to progress in the various fields of learning in accordance with his ability in each field.

This plan necessitates entirely different methods of grouping children for different activities. A child may excel in one activity and be rather advanced for his chronological age group; on the other hand, he may be retarded in learning a certain subject in comparison with children of his age level. A program of continuous pupil progress requires the adaptation of school organization to conditions of this sort. In other words, at the beginning of a new term each pupil will begin his work in each field of growth at the level that he has achieved. He will not be compelled to repeat those things that he has learned well just because he has not made satisfactory progress in other things. Briefly, the elementary school is regarded as an organization in which for six years opportunities will be provided for the continuous growth of each child. The nature of this program necessitates totally different interpretations of the terms "grade" and "promotion." Even with the old interpretation of promotion, research in this field has demonstrated conclusively that children who have not completed the work of a grade profit just as much, probably more, by being promoted.

There are teachers who ask, "Are we eventually to do away with grades?" That depends on the meaning which is read into the term "grade." If these teachers are using the word in the sense in which it was employed a number of years ago, then in most schools we have already eliminated grades. The old interpretation of grade was that all the pupils in a particular class had presumably mastered facts and skills taught in the preceding grades and were now prepared to study more advanced things specified for the new grade. We all

know that this situation is no longer found universally. We now have children in second-grade classes who are not ready to read, many who are just beginning to read, and some who are reading on higher than second-grade levels. I recently observed a third-grade class in which the range of intelligence quotients was from 85 to 130 and the reading levels varied from primer to fifth reader. For the purpose of correcting the wrong use of the term "grade," there is a tendency to use it as synonymous with school age as the most reliable general index of social maturity.

"What reward is there if we remove promotions?" ask a few teachers who were trained under the promotion regime. Under that system the reward for many a pupil who feared poor marks has been a nervous breakdown. Occasionally one reads of even more tragic consequences attributed to the humiliation of not being promoted. The pressure that some parents and teachers bring on children to secure high marks and promotion is certainly not conducive to mental hygiene. Had Hypatia been a modern teacher, she would have carried in one hand promotions instead of a bucket of water and in the other hand poor marks instead of a pan of burning coals. Both of these she would have cast into oblivion, so that children hereafter could study their lessons for the sake of the intrinsic satisfactions and not for fear of demerits or the hope of advancement to a higher grade.

Then there are teachers who ask, "How can sufficient challenge be presented to pupils in such a program? What will be the effect on the study habits of children as a result of our changed attitude toward marks and promotions?" Pupils cannot be *forced* to learn under any scheme. The idea that children study for marks is the result of generations of emphasis on marks. An "award" is anything extraneous or irrelevant to the act or work performed, which is given for the performance of the act or the work. Marks and promotions have fallen into that category. It is supremely important that children have something at which to aim. The aims established should, however, be pertinent to the work to be done. We should keep the children thinking in terms of things that are bigger and farther along than marks. We want them to be too big to work for mere labels or prizes. We want children to have their pay in a better

and a more enduring medium than those represent. We want to educate them from the level of incentives to the higher plane of motives. For this reason any extensive system of marks is to be wholeheartedly condemned.

Who are we to mark what actually happens to a child in the way of growth when he beholds a beautiful picture, draws in color an autumn leaf, sings an uplifting song, recites a poetic gem, takes his first step in reading, strives to improve his handwriting, studies his spelling words, participates in a discussion, assembles the parts for a miniature electric train, writes a letter to a sick classmate, safely guides children across a busy street, contributes to the alleviation of suffering, reaches his hands for a ball, struggles with the trinomial theorem, comprehends the ablative absolute, translates Vergil's *Aeneid*, analyzes test-tube revelations, travels in imagination through our vast America, dramatizes life in the Orient, considers the circumstances surrounding the war in Europe, plays his many parts in the school community, participates in activities of the student council, pledges allegiance to the flag, or listens to the reading of the twenty-third Psalm? Why desecrate these things with marks, when deep down in our souls we know how inadequate the most elaborate marking schemes are in terms of human values and social growth?

Through myriads of little experiences the child is finding himself in relation to his physical and social environment, and just who are we to label exactly how far he has gone? You may say, "But I can mark his papers." Disillusion yourself by taking any pupil's examination paper in any subject. Give it to ten teachers for marking, and the different marks will tell their own tale. What sins have been committed in the name of pedagogy! We cannot accurately agree on rating a child's tangible accomplishments, much less his effort and his growth. The hundreds of experiences in which a child daily engages defy any attempt to mark what happens inside the child as he reacts to those experiences. A few aspects of growth can be scientifically measured. Standardized tests have a definite place in our program. Diagnostic tests and remedial teaching are indispensable. Individual records of progress are important.

Let us turn our attention more to teaching and less to marking and behold the transformation that will take place not only in the

attitude of children but also in the happiness of teachers. Actuate children with fine motives, set up situations in which they feel their needs, stir their interests, and they will accomplish on high levels that frequently surpass our human comprehension. Teach in a fashion that is real, and the needs that the child feels will make it impossible for anyone to prevent him from studying with an earnestness and zest limited only by his inherent capacity and environmental resources. Our job is to provide real reasons for study. Marks and promotions as rewards or threats constitute no reason at all.

Another rather common question is, "What will happen when pupils are admitted to high school?" If the implication in this question is that pupils will not be prepared for high school, let it be said at once that a real program of continuous pupil progress will result in the mastery of fundamental facts and skills on a scale not to be found in arrangements that obtain in a grading-marking-promoting machine. Here is no attempt to belittle our social heritage.

There always were wide variations in ability among applicants for admission to high school, and there always will be wide differences. That individuals differ is a law of life. The most significant fact in creation is that of individual differences. We would not have it otherwise. What an uninteresting world this would be if every child about to enter a high school knew exactly the same facts in the same way and had developed various skills to the same degree and had an intelligence quotient of 140! Are we trying, through a system of mass production, to mold individuals in the same form, or are we trying to develop individuals? We cannot put children into Procrustean beds in the elementary schools to stretch them for high school any more than the high schools can stretch them for the universities. Let us, then, accept them as individuals and develop them as individuals.

When pupils are about to enter their tenth year of school, we should know what their individual powers and weaknesses are. A wide diversity of opportunities should be provided for these pupils. Proper placement is important. Junior high school guidance and the entire orientation program should provide the answer for each pupil.

If we cannot take care of pupils promoted to high schools, it is not their fault nor the fault of their previous teachers but rather a failure to adapt the offerings to the needs of different children at different levels of growth. Unfortunately too many educators still labor under the misapprehension that high school means Latin, Greek, analytic geometry, ancient history, and those other pursuits generally termed "academic." Too many still view high school solely as a college-preparatory institution. The American concept of culture has changed, and our educational institutions must adapt themselves to this changing concept. Our curriculum should meet the needs of children at different levels of growth no matter what those needs may be. That is the challenge in a program of continuous pupil progress. That is our responsibility in a democratic school system.

We do not know just what form the curriculum will assume, if it takes shape at all. We do know that it should be a living, dynamic, changing series of experiences conducive to growth. We also recognize that the selection and the timing of experiences are of great moment. We attach importance to the purposefulness and direction of experience. We regard experience as an integrating unit in growth. We acknowledge a direct and reciprocal relationship between freedom and growth and an integral relationship between freedom and responsibility. We dedicate ourselves to the inculcation of lofty ideals, the generation of worthy purposes, the instilment of aesthetic attitudes, the building of character, and the promotion of democratic processes. We respect the sanctity of human personality and the eternal value of every living soul. We appreciate the necessity for passing on our social heritage as a means of insuring the perpetuity and continuity of civilized life. We believe with Alexander J. Stoddard that "the progressive school of today considers that habits of critical analysis, powers of evaluation, standards of conduct, and desirable attitudes are just as important as the accumulation of facts, knowledge, and skills."[1]

The keynote in our school district project is the encouragement of adaptation to individual school conditions, for which

[1] Alexander J. Stoddard, "Implications of Progressive Education," *Philadelphia Teachers Association News Letter*, XXXVII (November, 1939), 4.

flexibility in administration is designed. A more democratic attitude is observable throughout the schools of the district and in certain schools in particular. The thinking of teachers, principals, and parents has been stirred. It is natural that there be opposition, criticism, and misunderstanding. These responses are all a part of the democratic way of living. When we do not provoke reactions, I seriously question that there is any thinking at all. In any deeply significant movement, opposition is anticipated and hence is not at all disturbing. Under such circumstances we understand the necessity for perennially evaluating our objectives and procedures. The aggressive opposition of minorities keeps us ever mindful of our obligations and responsibilities. Constructive criticism is recognized as a wholesome state of affairs, for critical analyses and helpful suggestions are essential to progress. We have endeavored to reduce misunderstandings to a minimum through observations, discussions, explanations, the exchange of views, and local publications. The only attitudes that cause any anxiety are smug complacence and obdurate indifference. Evidences of these apathetic resistances have been negligible.

A FUNCTIONAL READING LABORATORY IN A STATE TEACHERS' COLLEGE

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FOR five years North Texas State Teachers College has offered to advanced students a course in the psychology and teaching of reading. The course has not been required in any department of the College, but since its inauguration it has been much in demand by students majoring in both the elementary and the secondary fields. The recent pedagogical concern over reading skills and problems has included Texas, and an increasing demand from public-school superintendents in the state for teachers better prepared to teach children to read and to use reading has made itself felt. In an attempt to meet this demand, the College decided to expand its program for preparing teachers to teach reading and in the autumn of 1937 undertook to establish a reading laboratory.

In the establishment of the laboratory, the usual limitations of a state-supported college had to be considered. No special funds were to be had, no grants from foundations; the biennial legislative appropriation had been made, and there was just so much money and no more. There was also the difficulty of finding sufficient room, for unused space was unknown on the campus. From the beginning it was indeed not a question of what should be done but of what could be done. Through the encouragement of a farsighted administration, however, and the unselfish co-operation of several departments, ways and means were found to make the first step toward meeting what was believed to be the purposes of a reading laboratory in a teachers' college.

PURPOSES OF THE READING LABORATORY

These purposes were the guiding principles in choosing and assembling supplies and equipment and in organizing the procedures. The term "laboratory" rather than the term "clinic" was chosen be-

cause it was intended that the situation should be thought of as a place for work in all phases of reading instruction. It was thought that "laboratory" implied a broader, more general use than "clinic" and did not limit the function to diagnosis and correction. From its institution the laboratory had as its purposes:

1. The preparation of teachers for teaching reading in the public schools. The preparation was to include some understanding of the psychology of reading, comprehension of various methods of teaching reading, the recognition of special reading difficulties, some idea of the possibilities of the adjustment of reading instruction, and some knowledge of previous and current studies in the various phases of reading. To this end, the laboratory was to be a place where students could work together on general problems and singly on personal problems. The last purpose includes special problems met in teaching or in writing theses.

2. Service to the children of the Demonstration School and to the children of the public schools in the city and the surrounding area.

3. Service to students of the College who found themselves handicapped by lack of certain reading skills.

EQUIPPING THE LABORATORY

With these points in mind the instructor who was assigned to the task spent much time during the autumn of 1937 planning and organizing the supplies and equipment of the laboratory. In addition to the purposes stated, this basic principle was constantly held in mind: that, since the first objective of the laboratory was the preparation of teachers to teach reading, the materials and the equipment used in the preparation should be limited to such as could be obtained and used by public schools. It does not follow that all the equipment at present in use in the laboratory should be installed in all public schools but rather that none of it is beyond the reach of an average modern school. A part of the materials and supplies were already on the campus and had only to be assembled. Well-known pencil-and-paper tests and small pieces of equipment were included in our first purchase; cupboards were designed and built; and reading textbooks, workbooks, and story-books were brought in. By the end of the semester we discovered that the Reading Laboratory was not

only an activity and a procedure, but a place. Thus the basic cost was not excessive, especially when it is remembered that much of the equipment is permanent. The equipment, moreover, after two years of constant use is in excellent condition and should serve for a number of years more. Consumable materials used in the laboratory are supplied by the College, just as are materials used in other laboratories.

In the small room now used as the Reading Laboratory, we have a large worktable and chairs, a low table for children, blackboard, large-type typewriter, and the specially planned cupboards which contain the few instruments, test materials of many kinds, charts, supplies used for making practice materials, and files for confidential records. A small washroom adjoining the Reading Laboratory has been converted into an amateur darkroom. Unless occupied, the Reading Laboratory is kept locked, not so much from fear of theft as out of respect for the many subjects concerning whom we have on file much professional and confidential information.

FULFILLING THE PURPOSES

Beginning with the second semester of the year 1937–38, a second course in reading was offered through the Reading Laboratory. The work in the course was based on the assumption that the members of the class now had a good understanding of the normal reading processes and of the usual classroom procedures. Continuing from this point, we sought to give the students an insight into various types of reading difficulties, their multiple causes, and some of the procedures used in correcting them. The laboratory was thrown open as a workshop. Each student undertook the problem of helping a child who was experiencing reading difficulties. Each student also assisted in giving group tests and in interpreting the results. During that semester there were many things to learn and many things to do, but the indefatigable curiosity and pioneering spirit of the members of the first class did much to establish the course as successful and desirable. It should also be noted that, during this year of planning and organizing, the unfailing loyalty and intelligent assistance of a Senior student assigned as an N.Y.A. assistant were invaluable.

From this modest beginning the work of the laboratory has ex-

panded until about as many uses are made of it as can be handled with the present resources and space. As for meeting its first purpose, that of service to the teachers, there is now available for advanced students a full year of work in the field of reading. The course in the psychology and teaching of reading is so arranged that students majoring in either elementary or secondary education may apply the work on the requirements for state certification. While the course in techniques of diagnostic and remedial methods does not develop experts, it is believed that the students acquire in the laboratory a broader understanding of reading and a conviction that reading failures cannot be explained by the pedagogue's consolation "low intelligence quotient" nor by the all-covering kimono "lack of interest." The members of the classes have learned something about how to set up and maintain case histories; how to operate certain simple equipment; how to administer, score, and interpret many kinds of tests; and how to locate and assemble this essential information and data in practical situations. Several tests, such as those outlined by Stanger and Donohue,[1] have been set up and tried. The students have learned to think of tests as aids and guides, not as infallible conclusions. They have learned that data and personal information concerning their subjects are to be kept strictly as professional matters and not to be handled casually nor carelessly. Because these courses involve much practical work, requests for help through the classes have been numerous. Many individual problems have been worked out, some of which have led into further study for Masters' theses. On several occasions the entire class has participated in making surveys in the public schools of Denton and other cities, as well as in rural schools. Individual instruction in reading for periods of from six weeks to four months has been given to nearly a hundred children.

This kind of practice on the part of the students leads to the second purpose of the laboratory, that of service to the children and their teachers. Several hundred children, by actual count, have had their eyes checked for visual efficiency and their reading readiness, achievement, and types of reading errors studied. Many of these

[1] Margaret A. Stanger and Ellen K. Donohue, *Prediction and Prevention of Reading Difficulties*. New York: Oxford University Press, 1937.

children, as has been said above, have received effective aid from students working in the laboratory. A particular activity of the laboratory is the direction of a class in corrective reading in the Denton Junior High School. The resources of the laboratory are here extensively used, and the children are taught by a member of the advanced class under the supervision of the College instructor.

As to the third purpose of the laboratory, that of serving the College students at large, the original intention was to give whatever assistance was possible to individuals as they requested it. However, through the stimulus of the dean of the College, B. B. Harris, a program for the improvement of reading for Freshmen was undertaken last year. Letters of inquiry were sent to a number of colleges where students were being aided in their reading difficulties. The prompt and courteous replies received from the colleges were studied for ways and means. The suggestions received from the correspondence guided us in the organization of a class among the Freshmen for reading improvement. While the results of this first attempt were not remarkable, they were such as to cause Dean Harris to feel warranted in continuing the plan. During the first semester of 1939–40, the reading-improvment group numbered forty-five, and the College granted one semester hour's credit for the course. Students working in the laboratory course assist in the reading-improvement class.

Frequently individual students come to the laboratory for tests, advice, and information. Members of our advanced class work with these fellow-students, checking their visual efficiency, measuring their reading achievement and reading rate (a point which especially seems to trouble college students), and often guiding them in a series of practice lessons. Many students, it should be mentioned, have gone from the laboratory to oculists for examination and treatment.

OTHER SERVICES

The Reading Laboratory has frequent visitors. Public-school teachers come for suggestions, to see materials, and to ask for references on various problems, often bringing with them children whom they wish to have checked for causes of reading troubles. Too, it has been a pleasure to welcome as visitors instructors from other colleges,

supervisors, superintendents, and parents. No small part of the service which the laboratory tries to offer is the answering of numerous letters of inquiry concerning recent publications, materials, tests to be used, and corrective methods.

The interest and the enthusiasm of other departments of the College and members of the faculty have been important in the satisfactory progress to date of the Reading Laboratory. Faculty members frequently refer students to the laboratory for assistance. They recommend the reading courses to students majoring in their departments, share materials, give assistance, and generally indicate their belief that such a laboratory has a place in a teachers' college.

THE FUTURE OF THE LABORATORY

The College, with this beginning, looks forward hopefully to the growth of the laboratory. As our knowledge and experience in the field of reading are extended, we trust that the Reading Laboratory may become more effective in its preparation of teachers; that it may answer their questions with more accuracy and assurance; that service to the children and the students may be more efficient; that the relation of the Reading Laboratory to other departments on the campus may become closer. It is our sincere hope here at the College that the increased service will lead directly to a better and a more general understanding of the basic values and processes of reading in its relation to the educative growth at each and all levels of development.

SELECTED REFERENCES FROM THE LITERATURE ON EXCEPTIONAL CHILDREN

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THE references in the following bibliography from the literature on exceptional children are classified as follows: materials concerned with (1) subnormal, backward, and dull-normal children, (2) behavior and problem cases and dependent children, (3) juvenile delinquency, (4) superior and gifted children, (5) blind and partially seeing children, (6) crippled children, (7) deaf and hard-of-hearing children, (8) delicate children, (9) speech defectives, and (10) general references. The references in the first four of these classifications were compiled and annotated by Dr. Hildreth; those in the remaining classifications, by Dr. Ingram.

TRENDS NOTED IN LITERATURE ON THE MENTALLY EXCEPTIONAL CHILD

Several trends are evident in the recent literature and research studies relating to exceptional children. Much more attention than formerly is being paid to the dull and the slow-learning child as one who needs a curriculum different from that provided for normal children and yet unlike that provided for the mentally subnormal. There are frequent reports of a more practical and functional program for these children that includes the desirable features of the activity curriculum. There are more numerous and searching studies of environmental factors that contribute to wide individual differences in learning ability in school and out. Increasing attention to the problems presented by gifted children as they progress through school is reflected in many recent research reports. The gifted child is found to have his share of problems and to be in frequent need of guidance and adjustment service throughout his school career, but

segregation is not considered the most satisfactory answer to this child's peculiar learning requirements. More creative effort is directed toward expanding the curriculum for gifted children and relating it to the child's genuine purposes.

Subnormal, Backward, and Dull-normal Children

219. Abel, Theodora M. "Subnormal Girls with Discrepant Test Patterns," *Journal of Applied Psychology*, XXIII (June, 1939), 398–404.

An analysis of test scores for girls testing higher on nonlanguage material than on language tests. Results are compared with those for a group showing the opposite trend.

220. Abel, Theodora M., and Sill, Jane B. "The Perceiving and Thinking of Normal and Subnormal Adolescents and Children on a Simple Drawing Task," *Pedagogical Seminary and Journal of Genetic Psychology*, LIV (June, 1939), 391–402.

Characteristic differences in quantity and quality were found when groups of normal and of dull subjects were given instructions for dividing squares on paper into smaller squares.

221. Beaman, Florence N. "Progressive Education for the Mentally Retarded Child," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 2 (1938), pp. 86–90.

Makes the recommendation that classes for the mentally retarded partake more of progressive-education principles and gives illustrations of curricular changes.

222. Bryne, May E. "Program of Education for Mentally Retarded Children in a Public School System," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 2 (1938), pp. 116–22.

A description of the activities program developed for special-class children in Minneapolis.

223. Coleman, Marion U. "Remedial Reading for Special Groups," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 2 (1938), pp. 123–27.

A report of the work done in making diagnoses of reading deficiencies in mentally retarded children and in providing remedial instruction for them.

224. Ewerhardt, Paul J. "Reading Difficulties in Subnormal Children," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 1 (1938), pp. 188–93.

Reading-disability cases among subnormal children are classified, and appropriate treatment is described.

225. GRILLI, HELEN A. "Teaching Slow Learning Children," *Social Education*, III (March, 1939), 169–72.

A teacher of classes for slow learners in Speyer School, New York City, describes methods used in teaching social studies to slow children of elementary-school age.

226. HAMLIN, ROY. "Test Pattern of High Grade Mentally Defective Girls," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 1 (1938), pp. 161–65.

A study of the relation between test-score patterns of defective girls and adjustment indicated by parole.

227. HANKINS, RUTH. *Principles of Teaching Exceptional Children in the Elementary Schools.* Child Research Clinic Series, Vol. III, No. 1. Langhorne, Pennsylvania: Child Research Clinic, Woods Schools, 1939. Pp. 24.

Lists and discusses thirty basic principles that underlie progressive practice in teaching exceptional children in the elementary school. Includes illustrations from actual cases.

228. HANNA, AGNES K. "Some Observations on Extramural Care of Mentally Deficient Children," *Proceedings and Addresses of the Sixty-second Annual Meeting of the American Association on Mental Deficiency*, Vol. XLIII, No. 1 (1938), pp. 115–21.

A review of state and federal legislation providing care for mentally defective children.

229. HILDRETH, G. H. "Educational Provisions for Slow-learning Pupils," *Educational Administration and Supervision*, XXV (October, 1939), 491–512.

A report of a survey of educational provisions for slow-learning pupils in public schools throughout the country.

230. KEPHART, NEWELL C. "Notes on Social Group Structure in an Institution for Retarded Children," *Sociometry*, II (April, 1939), 95–98.

An effort is made in the cottage group plan at the Wayne County Training School, Northville, Michigan, to create a closely knit social structure which will give the individual child a secure social position and thus deter antisocial and self-centered activities.

231. LANE, ELIZABETH B., and KINDER, ELAINE F. "Relativism in the Thinking of Subnormal Subjects as Measured by Certain of Piaget's Tests," *Pedagogical Seminary and Journal of Genetic Psychology*, LIV (March, 1939), 107–18.

Describes the application of Piaget's brother-sister relation and right-and-left relation questions to Letchworth Village children. Data are summarized with reference to improvement in performance with rise in mental age.

232. *Meeting the Needs of the Mentally Retarded.* Bulletin No. 420. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 168.

The sections of this bulletin relate to the philosophy of special education, practical considerations in establishing special classes, standards for special classes, and class programs. An appendix contains bibliographical references, record forms, information about costs, and sources of equipment.

233. ORTLEB, RUTH. "The Needs of the Dull-normal Elementary School Child," *School and Society*, L (October 7, 1939), 453–61.

Summarizes the traits of dull-normal children and describes their school problems. Fourteen suggestions are given for meeting these problems, with emphasis on concrete learning situations and habit training.

234. RAVEN, J. C., and WAITE, A. "Experiments on Physically and Mentally Defective Children with Perceptual Tests," *British Journal of Medical Psychology*, XVIII (March, 1939), 40–43.

Physically handicapped children rated backward by their teacher scored normal on a perceptual test. Mentally defective children scored below normal.

235. ROGERS, WILLIAM C. "An Experimental Curriculum for Retarded Pupils," *Enriching the Curriculum for the Elementary School Child*, pp. 532–37. Eighteenth Yearbook of the Department of Elementary School Principals. Bulletin of the Department of Elementary School Principals, Vol. XVIII, No. 6. Washington: Department of Elementary School Principals of the National Education Association, 1939.

Describes an experimental program for mentally and educationally retarded pupils in Philadelphia who are twelve years of age or older and who have spent six years in school. The pupils are placed in an educational center where they have a nontraditional program at the junior high school level.

236. THOMPSON, WILLIAM H., and EDWARDS, FRANCES M. "The Reliability of Teachers' Reports about Subnormal Children Sent to the Child Study Bureau," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 2 (1938), pp. 98–104.

Reports sent by teachers when referring children for special or ungraded classes are found to yield valuable and reliable information.

237. WALSH, ELIZABETH A. "The Slow Learning Child in Our Public Schools," *Journal of Exceptional Children*, VI (October, 1939), 12–15, 32.

Gives a description of the work in handling mentally backward children done by the Bureau for Children with Retarded Mental Development of the New York City Schools.

238. WERNER, H., and STRAUSS, A. "Problems and Methods of Functional Analysis in Mentally Deficient Children," *Journal of Abnormal and Social Psychology*, XXXIV (January, 1939), 37–62.

Children who did not succeed in dealing successfully with concrete number forms failed when they were required to deal with abstract number operations. Various patterns of arithmetic disability are described.

239. WILCOX, CATHARINE J. "The Work with Retarded Children in the State of Virginia," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 1 (1938), pp. 128–36.

A report summarizing data relating to care and placement of mentally subnormal children in Virginia.

BEHAVIOR AND PROBLEM CASES AND DEPENDENT CHILDREN

240. BAYLOR, M. H., and MONACHESI, E. D. *Rehabilitation of Children.* New York: Harper & Bros., 1939. Pp. xii+560.

A report of child placement by social agencies. Includes a historical survey and pertinent data regarding child placement and a description of placement activities in two New England agencies.

241. BENDER, L. "Behavior Problems in Negro Children," *Psychiatry*, II (May, 1939), 213–28.

Indicates that the rate of incidence for behavior problems among Negro children studied at Bellevue Hospital has increased in recent years. Gives an outline of the study and achievement afforded these children and of the nature of the problems that they present.

242. DESPERT, J. L. *Emotional Problems in Children.* Utica, New York: State Hospitals Press, 1938. Pp. 128.

A description and evaluation of the psychotherapy method for children used at the New York Psychiatric Institute. Case records are included.

243. DUREA, M. A. "Introversion-Extroversion and Problem Tendencies in Children," *Educational Research Bulletin*, XVIII (April 5, 1939), 103–6, 115–16.

An analysis of the relation between introversion and extroversion and problem tendencies in children is made by means of several rating schedules.

244. EDELSTON, H. "The Analysis and Treatment of a Case of Neurotic Conduct Disorder in a Young Child Illustrating the Value and Use of Drawing in Child Guidance Technique," *Journal of Mental Science*, LXXXV (May, 1939), 522–47.

Describes the clinical treatment and progress of a seven-year-old child with a marked behavior disorder.

245. HILL, ARTHUR S. "Can the Elementary Grade Teacher Identify Potential Behavior Cases?" *Journal of Exceptional Children*, V (February, 1939), 110–20.

A research study concluding that classroom teachers are unlikely to predict which children will later become adjustment problems of a severity warranting referral to an outside agency.

246. HIRSCH, N. D. M. "Relationship between Interest, Ability, and Self-estimated Ability among Maladjusted Boys," *Journal of Abnormal and Social Psychology*, XXXIV (July, 1939), 395–99.

In various intelligence levels and age groups, interests proved to be much more a wishful estimate of a child's ability than an accurate appraisal of his real ability.

247. PARTRIDGE, J. M. "Truancy," *Journal of Mental Science*, LXXXV (January, 1939), 45–81.

An analysis of fifty cases of truancy from home and school among boys and girls, with an indication of various causal factors.

248. ROGERS, C. R. *The Clinical Treatment of the Problem Child*. Boston: Houghton Mifflin Co., 1939. Pp. xiv+394.

A book devoted to diagnostic and treatment procedure for maladjusted children. Research data relating to each type of treatment are summarized, and a bibliography is included.

249. SHERMAN, MANDEL. "The Interpretation of Schizophrenic-like Behavior in Children," *Child Development*, X (March, 1939), 35–42.

A report of difficulties experienced in diagnosing seventeen cases and a summary of the common characteristics found in a group of schizophrenic children.

JUVENILE DELINQUENCY

250. BERMAN, NATHAN. "Juvenile Delinquency under the Soviets," *Journal of Criminal Law and Criminology*, XXX (May–June, 1939), 68–76.

A description of the Soviet program for rehabilitating the delinquent. The underlying philosophy is closely linked to the Soviet approach to life in general.

251. COOPER, COURTNEY RYLEY. *Designs in Scarlet*. Boston: Little, Brown & Co., 1939. Pp. 372.

A study of juvenile delinquency and organized prostitution based on facts obtained by the author from actual conversations and from personal visits to places contributing to the demoralization of adolescent boys and girls.

252. COX, W. B., and BIXBY, F. L. (editors). *Handbook of American Institutions for Delinquent Juveniles:* Vol. I. West North Central States. New York: Osborne Association, Inc., 1938. Pp. xiv+432.

A useful directory.

253. DAVIDOFF, E., and BUCKLAND, G. "Reaction of a Juvenile Delinquent Group to Story and Drama Techniques," *Psychiatric Quarterly*, XIII (April, 1939), 345–58.

A control study in which the reactions of delinquents and nondelinquents to puppet and drama techniques were compared.

254. DELINQUENCY DIVISION STAFF, UNITED STATES CHILDREN'S BUREAU. "Children under Care of the State Training Schools for Socially Maladjusted Children," *Child*, Special Supplement, III (December, 1938). Pp. 16.

Summarizes data from ninety-five schools on age and residential status of socially maladjusted children.

255. DOLL, EDGAR A., and FITCH, K. A. "Social Competence of Juvenile Delinquents," *Journal of Criminal Law and Criminology*, XXX (May–June, 1939), 52–67.

An analysis of data from the Vineland Social Maturity Scale indicates that the social competence of delinquents is strikingly below that of normal nondelinquents.

256. DUREA, M. A. "The Differential Diagnosis of Potential Delinquency," *American Journal of Orthopsychiatry*, IX (April, 1939), 394–98.

The future delinquent can be distinguished by traits observed in unadjusted cases.

257. FORD, CHARLES A. "Institutional Rearing as a Factor in Delinquency," *The Challenge of Progressive Education*, pp. 40–46. Proceedings of the Fourth Conference on Education and the Exceptional Child of the Child Research Clinic of the Woods Schools. Langhorne, Pennsylvania: Child Research Clinic, Woods Schools, 1938.

As the result of analyzing data for 691 cases of consistent delinquency, the author concludes that foster-home placement does not appear to be more advantageous than placement in child-care institutions.

258. HARRIS, D. B. "Use of the Anecdotal Behavior Journal in a Correctional School for Boys," *Journal of Juvenile Research*, XXII (July–October, 1938), 162–68.

The use of an anecdotal behavior record in the Minnesota State Training School for Boys is described, and its value to the teaching, clinical, and administrative staffs is indicated.

259. *Juvenile Court Statistics and Federal Juvenile Offenders.* United States Children's Bureau Publication No. 245. Washington: Government Printing Office, 1939. Pp. iv+156.

Information supplied by 398 juvenile courts in 1935, by 384 courts in 1936, and by the United States Department of Justice relative to juvenile courts throughout the country and federal juvenile offenses for a two-year period ending in 1936.

260. KARPMAN, BEN. "The Delinquent as a Type and Personality," *Journal of Criminal Psychopathology*, I (July, 1939), 24–33.

A discussion of the delinquent personality and a definition of delinquency. The author concludes "that there is no particular type or personality that may be characterized as being specifically delinquent."

261. KERR, WILLIAM. "How the Police Can Prevent Juvenile Crime," *Police Journal* (London), X (July–September, 1937), 206–14.

A description of ways in which the police, through exercising vigilance toward children and organizing and supervising their activities, can aid in preventing juvenile delinquency.

262. LEMESURIER, LILIAN. *Boys in Trouble.* London: John Murray, 1939 (second edition). Pp. 320.

An account, from the lay point of view, of the backward methods of handling the Borstal boys with whom the author worked at Wormwood Scrubbs.

263. MANN, CECIL W., and MANN, HELENE POWNER. "Age and Intelligence of a Group of Juvenile Delinquents," *Journal of Abnormal and Social Psychology*, XXXIV (July, 1939), 351–60.

Summarizes data relating to the sex, average age, and average intelligence quotient of 1,731 juvenile delinquents.

264. MANN, CECIL W., and MANN, HELENE POWNER. "An Analysis of the Results Obtained by Retesting Juvenile Delinquents," *Journal of Psychology*, VIII (July, 1939), 133–41.

A high degree of consistency was found on retesting 428 juvenile delinquents when first and subsequent intelligence quotients were compared.

265. SAFFIR, MILTON A. "Behind the Delinquent," *Chicago Schools Journal*, XX (January–February, 1939), 105–9.

A discussion of two major approaches to the prevention of juvenile delinquency: character education and provision of desirable outlets for legitimate satisfaction.

266. SHAW, CLIFFORD R. "Group Factors in Delinquency among Boys," *Proceedings of the Third Biennial Meeting of the Society for Research in Child Development, 1938*, pp. 14–26. Washington: Society for Research in Child Development, National Research Council, 1939.

Indicates that the gang initiates boys into delinquent careers, gives knowledge of delinquency techniques, forms attitudes and interests of the habitual delinquent, and provides the delinquent boy with certain satisfactions.

267. SISISKY, FRANCES. "The Later Social Adjustment of a Group of Borderline Defective Delinquents Trained at the Oaks School," *Smith College Studies in Social Work*, X (September, 1939), 36–49.

A follow-up study of mentally borderline juvenile delinquents trained in an institution. Fifty per cent made good adjustment. It was possible for the staff to predict which boys would make good adjustments and what help they would need.

268. SPEER, GEORGE S. "Social Value of Agricultural Training for Delinquent Boys," *Social Service Review*, XII (December, 1938), 640–50.

Placement of delinquent boys in farm areas following parole from an industrial farm has tended to create more problems than it has solved.

269. TULCHIN, SIMON H. *Intelligence and Crime.* Behavior Research Fund Monographs. Chicago: University of Chicago Press, 1939. Pp. xiv+166.

A study based on psychological tests given to offenders in Illinois State Reformatory and Penitentiary. Furnishes data on the relation of intelligence to crime.

270. WIERS, P. "Juvenile Delinquency in Rural Michigan," *Journal of Criminal Law and Criminology*, XXX (July–August, 1939), 211–22.

Delinquency was found to be extensive in rural areas though less per capita than in industrial centers.

271. WRIGHT, C. A. "The Sex Offender's Endocrines," *Medical Record*, CXLIX (June 21, 1939), 399–402.

Evidence covering endocrine irregularities in seventy-three girl homosexual cases is reported, and treatment for the disorders is evaluated.

SUPERIOR AND GIFTED CHILDREN[1]

272. BEAR, MATA V. "How St. Louis Schools Serve Their Bright Pupils," *Journal of the National Education Association*, XXVIII (April, 1939), 121.

A brief description of the activities carried on in regular classes by gifted children in St. Louis.

273. BLAIR, G. M. "Subject Preferences of Mentally Superior and Inferior Senior High-School Students," *Journal of Educational Research*, XXXIII (October, 1939), 89–92.

Mathematics is the subject best liked by mentally superior boys; shop, by the mentally inferior. Superior girls like English best; inferior girls, home economics.

274. DEPPENBROCK, AUDREY R., GOETZ, PEARL W., HERMON, HELEN, and MAHON, VIRGINIA L. (compilers). "Enrichment Activities for Capable Pupils," *Baltimore Bulletin of Education*, XVI (May–June, 1939), 165–75.

An account of enrichment programs carried on with gifted children in the elementary schools of Baltimore.

[1] See also Items 705 (Hollingworth) and 735 (Thorndike) in the list of selected references appearing in the December, 1939, number, and Item 147 (Rigg) in the March, 1940, number of the *Elementary School Journal;* and Item 347 (Blair) in the May, 1940, number of the *School Review.*

275. "The Education of Gifted Children in Secondary Schools," *Journal of Educational Sociology*, XIII (October, 1939), 65–126.

This number contains a series of articles prepared by leading authorities on the following topics: "Educating the Elite in Europe," "Educational Suggestions from Follow-up Studies of Intellectually Gifted Children," "Problems of Relationship between Elementary and Secondary Schools in the Case of Highly Intelligent Pupils," and educating superior students in the high schools of New York City and Los Angeles.

276. GOETSCH, HELEN B. "Inequality of College Opportunity," *Journal of the National Education Association*, XXVIII (December, 1939), 271.

A survey of the further-schooling status of 1,023 public high school graduates with intelligence quotients ranging from 117 to 146 showed that less than half were in college. There was a relation between size of family income and tendency to be in college.

277. GREENBERG, BENJAMIN B. "The Education of the Intellectually Gifted," *Journal of Exceptional Children*, V (February, 1939), 101–9, 124.

A description of various methods currently used in providing proper educational facilities for gifted children, with details concerning the work at the Speyer School, New York City.

278. MONTGOMERY, G. MILLAGE. "Special Arrangements for One School's Bright Pupils," *School Review*, XLVII (May, 1939), 328–30.

A brief description of special provisions for gifted pupils in a Los Angeles high school.

279. SCHUCK, MYRNA INGRAM. "Curriculum Enrichment for Rapid Learners," *Social Education*, III (March, 1939), 173–76.

A teacher in Speyer School, New York City, describes the methods used to enrich the educational program for children in the intelligence-quotient range of 130–200.

280. SIMMONS, R. M. *A Study of a Group of Children of Exceptionally High Intelligence Quotient in Situations Partaking of the Nature of Suggestion.* Teachers College Contributions to Education, No. 788. New York: Teachers College, Columbia University, 1940. Pp. x+112.

Statistically reliable differences were found when groups of subjects both high and low in intelligence were given objective tests of suggestion. Ratings disclosed group differences but were found to be valueless for individual diagnosis and comparison.

281. WILE, I. S., and DAVIS, R. M. "Behavior Differentials of Children with I.Q.'s 120 and above and I.Q.'s 79 and below, with Some Reference to Socio-economic Status," *American Journal of Orthopsychiatry*, IX (July, 1939), 529–39.

Problems and difficulties of the superior group are no less numerous than those of the inferior group although the superior group is more readily adaptable socially.

TRENDS NOTED IN LITERATURE ON THE PHYSICALLY HANDICAPPED

The trends noted a year ago continue to be evident in the literature. These trends are, namely, the need for articulation between medical and educational programs, the need for personality study and for the mental-hygiene approach to the individual problem, the recognition of the preschool area as a significant field for studying the nature and the cause of deviation, and the study of vocational adjustments for the handicapped. Fewer significant studies of a research nature are reported in the literature this year. There is a continuing number of teacher observations, studies, and methods.

Blind and Partially Seeing Children

282. Davidson, Margaret, and Brown, Andrew W. "The Development and Standardization of the I.J.R. Test for the Visually Handicapped," *Journal of Applied Psychology*, XXIII (April, 1939), 229–39.

A study from the Institute for Juvenile Research, Chicago, describing the construction of a test in point-scale form for testing children visually handicapped.

283. Farrell, Gabriel. "Mental Hygiene for the Blind," *Mental Hygiene*, XXIII (April, 1939), 215–27.

The director of Perkins Institution and Massachusetts School for the Blind, Watertown, Massachusetts, discusses the nature of adjustments made by the blind, which indicate the need for the mental-hygiene approach in the educational program.

284. Hill, O. J. "Another Beam of Light through the Darkness," *Journal of Exceptional Children*, VI (January, 1940), 129–37.

Reports on the use of W.P.A. subsidy for preparing accurately scaled educational models of things which the blind can experience through the tactile sense. The models include animal forms and historic and architectural forms.

285. Hitz, John B. "An Evaluation of Vision-testing Methods in Schools," *Sight-saving Review*, IX (March, 1939), 47–52.

A preliminary report of the use of the Snellen chart, the Betts telebinocular test, and an ophthalmic test, as a "screening process" for testing children's vision.

286. Löwenfeld, Viktor. *The Nature of Creative Activity*. New York: Harcourt, Brace & Co., 1939. Pp. xviii+272.

A Viennese teacher of the blind reports on experimental and comparative studies of visual and nonvisual sources of drawings, paintings, and sculpture made by partially seeing and blind children. The book contains copies of the children's art products on which conclusions are based.

287. McVickar, Olive. "A Nursery School for Children with Impaired Vision," *Teachers Forum for Instructors of Blind Children*, XII (September, 1939), 12–16.

Describes the nursery-school program for children with impaired vision at the Boston Nursery for the Blind.

288. PHELPS, SARAH LATIMER. "Motivated Handwork and Activity Units in Sight-saving Classes," *Sight-saving Class Exchange*, No. 70 (November, 1939), pp. 41–53.

A teacher suggests worth-while classroom activities and includes forty-one selected titles for reference, with a review for each.

289. PRINE, OLIVE. "Diagnostic and Remedial Techniques in Teaching Arithmetic," *Teachers Forum for Instructors of Blind Children*, XII (September, 1939), 6–10.

A teacher discusses ways of discovering difficulties and of adapting the arithmetic curriculum to meet better the needs of visually handicapped pupils.

290. ROSENTHAL, META. "The Psychological Touch in Straightening Cross-Eyes," *Sight-saving Review*, IX (March, 1939), 11–17.

Discusses the place of the orthoptic clinic and the psychological guidance in the home that is necessary in assisting the child to overcome strabismus.

291. "Sight Conservation through Fuller Understanding of the Patient—A Symposium," *Sight-saving Review*, Supplement, IX (December, 1939), 3–28.

Three articles by medical case workers describe clinic eye-treatment and follow-up which take account of the background and the personality of the child and the adult. The significance of treatment is illustrated in case reports of individual patients.

292. "Vocational Guidance and Opportunities," *Sight-saving Class Exchange*, No. 71 (February, 1940), pp. 5–41.

This number presents a series of articles on vocational guidance written by a group of teachers. Attention is given to means and values of guidance from the elementary school on.

CRIPPLED CHILDREN

293. BALL, GEORGIA. "Case Work with Crippled Children," *Family*, XX (April, 1939), 56–63.

The problems of adjustment of crippled children in the family, school, and community are not peculiar to the handicap but may be intensified by it. Treatment must be based on factors within the family and the resources in the community.

294. DIMCHEVSKY, ESTHER M. "The Social Content of Work with Crippled Children," *Mental Hygiene*, XXIII (July, 1939), 421–31.

A psychiatric social worker discusses the worker's responsibility with respect to the personality needs of the handicapped. She uses striking illustrations of individual children and their parents who must face problems in adjustment.

295. HOOD, R. C. "Crippled Children's Services under the Social Security Act —Three Years Old," *Crippled Child*, XVI (April, 1939), 166–71.

The director of the Crippled Children's Division of the United States Children's Bureau discusses medical, surgical, therapeutic, vocational, and educational services that are being promoted under the Social Security Act in the forty-eight states and two territories.

296. PUSITZ, M. E. "Speech Correction in Cerebral Palsies," *Journal of Speech Disorders*, IV (September, 1939), 205–18.

A comprehensive description of cerebral palsy, with recommendations for physical treatment and speech work based on the psychological-psychiatric approach.

297. RINGMAN, BERNICE. "A Summer Program for Crippled Children," *Journal of Exceptional Children*, VI (October, 1939), 26–32.

Discusses different kinds of recreational activities that can be made beneficial to the crippled child.

DEAF AND HARD-OF-HEARING CHILDREN

298. BLUETT, C. G. "Vocational Survey of the Graduating Class of the California School for the Deaf," *Volta Review*, XLI (October and November, 1939), 549–55; 615–20, 662.

The training officer of San Francisco's Bureau of Vocational Rehabilitation describes a survey, reports information on individual cases, and offers vocational suggestions.

299. GOLDSTEIN, MAX. *The Acoustic Method for the Training of the Deaf and Hard-of-Hearing Child*. St. Louis: Laryngoscope Press, 1939. Pp. 246.

The director of the Central Institute for the Deaf at St. Louis describes the acoustic method developed in his school. Graduated practical exercises for developing perception of tones and spoken language are outlined.

300. HICKER, H. D. "Co-ordination of Services for Vocational Adjustment of the Deaf," *American Annals of the Deaf*, LXXXIV (September, 1939), 322–31.

The chief of the Bureau of Vocational Rehabilitation of the California State Department of Education appeals for the co-operative effort of all services in vocational training, counseling, and placement of deaf persons.

301. JOHNSON, ELIZABETH HUGHES. "Testing Results of Acoustic Training," *American Annals of the Deaf*, LXXXIV (May, 1939), 223–33.

At the Illinois School for the Deaf tests of (1) drill vocabulary, (2) speech intelligibility, (3) acoustic understanding, (4) acoustic understanding combined with speech reading, and (5) speech reading were given to deaf and hard-of-hearing children following full-time use of the earphone in their classes. The conclusion is that the degree of success in speech and lip reading is directly related to the extent to which hearing is trained.

302. KNUDSEN, VERN O. "The Golden Age of Hearing Aids," *Volta Review*, XLI (November, 1939), 613–14, 664–65.

Discusses the construction and the advantages of the vacuum-tube aid and its present limitations. The advantages of binaural hearing aids over the monaural are also stated.

303. MASON, MARIE K. "Individual Deviations in the Visual Reproduction of the Speech of Two Speakers," *American Annals of the Deaf*, LXXXIV (November, 1939), 408–24.

Reports a study to determine the extent of individual differences existing in the visual speech characteristics of two speakers and to provide a simple objective means of rating these reproductions. Comprehensive conclusions resulting from the experiment are stated.

304. ROSENTHAL, DORA A. "The Employment Status of the Deaf and Hard of Hearing in Chicago," *Volta Review*, XLI (June, 1939), 336–37, 374–75.

A teacher reports questionnaire returns from fifty-one deaf and hard-of-hearing persons. The variety of jobs filled and the satisfactory reports of employers indicate success for the large majority.

305. "Vocational Education in American Schools for the Deaf," *American Annals of the Deaf*, LXXXIV (January, 1939), 34–35.

Presents a classified list of vocations which are at present taught in schools for the deaf with the direct purpose of fitting the pupils for some gainful occupation.

DELICATE CHILDREN

306. DAVIS, DAVID B. "The Epilepsies," *Journal of Exceptional Children*, V (April, 1939), 166–75, 178.

Describes the various convulsive states of epilepsy and discusses new methods of study by encephalography and electro-encephalography.

307. LEVANDOWSKI, RHEA. "Attitudes toward a School Program in a Hospital," *Crippled Child*, XVII (August, 1939), 40–44.

A symposium by teachers in which they report the development and growth in wholesome attitudes of individual children as a result of a hospital teaching program.

308. MATHEISON, CLELE LEE. *Hospital Schools in the United States*. United States Office of Education Bulletin No. 17, 1938. Pp. 80.

Presents an analysis of existing legislation concerning hospital schools and an investigation of present practices in 162 hospital schools in thirty-three states and two territories.

309. PATRY, FREDERICK L. "Psychiatric Principles in Educational Methodology with Special Reference to Epileptics," *Journal of Exceptional Children*, VI (October, 1939), 3–6, 21.

A psychiatrist states twenty-two principles which should be taken into account by the teacher guiding a child who suffers from epilepsy.

310. *The Physically Below-par Child*. Report of the Committee on the Care and Education of Below-par Children. New York: National Tuberculosis Association, 1940. Pp. 20.

The findings and conclusions concerning the care and the education of children with lowered vitality are reported by a representative committee of educators, hygienists, nutrition workers, and physicians.

Speech Defectives

311. Boome, E. J., Baines, H. M. S., and Harries, D. G. *Abnormal Speech.* London: Methuen & Co., Ltd., 1939. Pp. 174.

A treatise on all forms of speech disorder—functional, organic, and psychogenic. Methods of treatment are prescribed, including descriptions of remedial exercises.

312. Buckley, H. M. "How Speech Training Is Conducted in the Cleveland Public Schools," *Quarterly Journal of Speech*, XXV (April, 1939), 200–204.

A report of a year's work in the Cleveland schools, with special reference to the contribution which kindergarten and first-grade teachers can make in correcting speech defects in the classroom.

313. Card, Robert E. "A Study of Allergy in Relation to Stuttering," *Journal of Speech Disorders*, IV (September, 1939), 223–30.

Reports a study of 104 case histories of stutterers and their families with respect to allergic symptoms. The similarities between the factors of stuttering and asthmatic reactions, together with positive histories of allergy in the stutterers' families, suggest advisability of further study of these relationships.

314. Davis, Dorothy M. "The Relation of Repetitions in the Speech of Young Children to Certain Measures of Language Maturity and Situational Factors, Part I," *Journal of Speech Disorders*, IV (December, 1939), 303–18.

This study from the University of Iowa on the extemporaneous speech of each of sixty-two children, from twenty-four to sixty-two months of age, shows that repetition of syllables, words, and phrases combined gave a fairly normal distribution for all the children. These data indicate that repetition is part of the speech problem of all children. Further research will be carried on.

315. Fagan, H. R. "Methods of Treatment for Spastic Speech," *Journal of Speech Disorders*, IV (March, 1939), 25–32.

Presents in detail methods of treatment for spastic speech used with success in training nine children ranging in age from three to fourteen years. Most of the cases were complicated by aphasia or deafness accompanying the motor disorder.

316. Gifford, Mabel Farrington. *Correcting Nervous Speech Disorders.* New York: Prentice-Hall, Inc., 1939. Pp. xvi+198.

The director of speech correction and defects of the California State Department of Education describes the techniques used for the correction of stammering in the California schools. The emotional aspects of behavior in teacher and pupil are recognized as a significant element in the treatment plan.

317. Templin, Mildred, and Steer, M. B. "Studies of Growth of Speech of Preschool Children," *Journal of Speech Disorders*, IV (March, 1939), 71–77.

A first report in an intensive study of speech in preschool children. The growth in articulatory development was recorded regularly by speech clinicians.

318. VAN RIPER, CHARLES. *Speech Correction*. New York: Prentice-Hall, Inc., 1939. Pp. xx+434.

A textbook designed to give a basic knowledge of the principles and methods of speech correction, not only to help the speech specialist, but also to encourage co-operation in a speech program on the part of all the school personnel. It deals with the nature and the development of speech in young children, its relation to personality development, and the diagnosis and detailed methods of treatment for speech and voice disorders.

319. WEST, ROBERT; NELSON, SEVERINA; and BERRY, MILDRED. "The Heredity of Stuttering," *Quarterly Journal of Speech*, XXV (February, 1939), 23–30.

An analysis of heredity, social contacts, and sex is made from complete data on 204 stutterers and 204 control subjects. Results suggest that the tendency to stutter is transmitted from generation to generation and that certain environmental factors may contribute to the development of the malady.

GENERAL REFERENCES[1]

320. BLUETT, C. G. "Objective Analysis in Vocational Placement," *Volta Review*, XLI (March, 1939), 133–35, 179.

The training officer of the San Francisco Bureau of Vocational Rehabilitation offers data on objective tests for selected cases which illustrate the function of such tests in job retaining.

321. GOOD, CARTER V. "Research Methods and Problems of Exceptional Children," *Journal of Exceptional Children*, V (May, 1939), 203–8.

Reports that less than 5 per cent of the Doctors' and less than 3 per cent of the Masters' theses undertaken in 1935–37 treat problems of exceptional children. From 1937 to 1939 about 5 per cent of the Doctors' theses treated these topics. A broadening concept of special education is advised.

322. MARTENS, ELISE. "Residential Schools for Handicapped Children," *School Life*, XXIV (March, 1939), 166–68.

States the number cared for in twenty-four-hour schools throughout the United States for deaf, blind, mentally retarded, and delinquent children. The educational contribution of these schools to the general education program for all children is noted.

323. "Special Schools in Latin America," *Volta Review*, XLI (July, 1939), 396–98, 424.

Lists the names and addresses of special schools for mentally and physically handicapped pupils in countries of Latin America.

[1] See also Item 283 (Stafford) in the list of selected references appearing in the March, 1940, number of the *School Review*.

Educational Writings

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REVIEWS AND BOOK NOTES

THE PHILOSOPHY OF EDUCATION RESTORED TO ITS RIGHTFUL POSITION.—Professor Brubacher has made an important contribution[1] to the study of the philosophy of education. He has recognized, and has sought to avoid, the danger of separating the philosophy of education from the field of general philosophy. "Beneficial as this specialization has been, it has, perhaps, gone too far. Educational philosophy has tended to slip its moorings to general philosophy, especially under the leadership of pragmatism, which some indict as a veritable denial of the possibility of philosophy" (p. vii). Too long now have students of the philosophy of education been exposed to one school of thought without even knowing, unless they already bring to the study a rich background of general philosophy, that other schools of thought and other methods of approach to the problems of education are possible. Or, if they do hear of the existence of other views, they tend to wipe them off the slate by such clichés as "traditional," "authoritarian," or "undemocratic." It almost seems as if those who have been most vociferous in decrying indoctrination have themselves been most guilty of the alleged offense which they attack. The result has been that, when the student is confronted with conflicts of opinion, he is unable to determine what the basic issue in the conflict is or to recognize that there are problems in philosophy to which thinkers have devoted their attention for centuries. It is possible to respect a person who has studied conflicting points of view in philosophy in general and in the philosophy of education in particular; he has at least weighed, judged, discriminated, and made his choice. It is not possible to have the same respect for a person who accepts ready-made a philosophy without even knowing that other philosophies have existed and are still current.

This situation Professor Brubacher has sought to correct. As he states in his Preface, he has limited himself to description and exposition and has refrained from giving his own views. "In contrast, it is rather the object of this endeavor to present in a form as unbiased as possible the alternate possibilities on which the careful student may base his own philosophy of education" (p. ix). But Professor Brubacher has done more; he has brought back to the attention of the serious student a number of questions which are of fundamental significance in any consideration of education and which explain differences in current points of view more basically than do the allegations of conservative or radical prej-

[1] John S. Brubacher, *Modern Philosophies of Education*. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xiv+370. $3.00.

udices on social and political outlooks. The so-called "essentialist" and the so-called "progressive" may stand for the same social or political purposes, but the differences between them can be understood only in the light of their differences on philosophical issues.

It is for this reason that Professor Brubacher's work is to be commended for departing from what, with few exceptions, has in recent years come to be regarded as covering all that a student needs to know about the philosophy of education. After defining the "Scope and Function of Educational Philosophy," the author proceeds immediately to a discussion of the "Metaphysical Bases of Education," and the "Epistemological Bases of Education," both of which have been left out of current discussions, with consequent misunderstanding of issues. "Educational Values" are then analyzed and followed by another important consideration of the "Philosophical Aspects of Educational Psychology." From this point on, the author proceeds to take up many of the problems which have received major attention in recent years: "The Individual, Society, and Education," "Education and Political Theory," "Education and the Economic Order," "The Civil State and Education," "The School and Social Progress," "The Educative Process," "Religion, Morals, and Education," and "Systematic Philosophies of Education."

Professor Brubacher has successfully carried out the task which he set himself of presenting conflicting points of view on every one of the issues which he raises. As the editor of the series, Dean Harold Benjamin, says of the book in his Introduction: "For the educational theorist, it offers a listing of viewpoints against which his own philosophy may be compared and checked for practical implications. For the general student of education, it furnishes a complete and stimulating treatment of the field of educational philosophy" (p. xiv). With this statement the reviewer heartily agrees, but he is disposed to raise the question whether the book would not have been enriched if Professor Brubacher had gone beyond description and exposition and presented his personal points of view. The serious student will not find this a simple book (one wonders whether a great deal of harm has not already been done by the apparent simplicity of many recent philosophies of education), but he will be repaid for his efforts in studying it.

I. L. KANDEL

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DETAILED HELP FOR THE STUDENT AND TEACHER OF READING.—Witty and Kopel's book[1] will be found of great interest and importance to all who are concerned with reading in the schools. It presents, in its 374 pages, a philosophy, a review of methods, and a report of significant research up to date. The authors

[1] Paul Witty and David Kopel, *Reading and the Educative Process.* Boston: Ginn & Co., 1939. Pp. x+374. $2.50.

adhere throughout to the point of view expressed in the first two chapters: that reading should be an integral part of an education which prepares for life through an ever-expanding range of experiences based on interests. In fact, the second chapter, "Interest as a Factor in Reading," expresses the conviction of the authors that interest is the mainspring of remedial reading as of all reading. This chapter, with a bibliography of 128 items, is an excellent summary of the literature on children's interests in reading. Then follows a chapter on "Identifying the Poor Reader," in which the authors state plainly the gist of their experience in handling the problem and thus give a sort of preview of much that is to follow. The chapter will be of great immediate help to the classroom teacher who wants to know, in as direct terms as possible, just how he is to approach the problem of the poor reader. The next two chapters summarize remedial methods in elementary and secondary schools. Detailed reports of the authors' work in this field are given. In their comments on the various experiments the authors do not hesitate to express their disapproval of the "mechanical approach" and of methods that merely try to "eliminate symptoms." Their own conclusion is that "an effective program of remedial instruction must aim toward change in the whole child and his adjustment to his environment in and out of school" (p. 144).

The next topic is "The Prevention of Reading Difficulties," which is practically a summary of the huge literature on reading readiness (126 references at the end of the chapter). Here it might be suggested that even beyond Grade I steps may be taken to prevent reading difficulties. Then follows "The Causation and Analysis of Reading Difficulties," which is a summary of the research in this field (178 references on twelve possible causal factors). The next chapter is devoted to clinical procedures, especially as used at the authors' own clinic. The final chapter, "Trends in Reading Instruction," again emphasizes the newer philosophy in education and its relation to reading.

This book is notable for its emphasis on reading as part of the general educative processes rather than merely as a collection of skills, though it does not fail to give these skills their proper attention. The book is also notable as a summary of research and discussion from many sources. An eight-page index makes possible easy reference to individual items. The book seems to be planned for college classes in which there is guidance in comparison and evaluation of conflicting evidence and for which there are ample library facilities. The bibliographical references listed (some of them unfortunately rather old) total 585. The only question concerning the wide usefulness of the book is whether the classroom teacher, unskilled in handling masses of data, may not have difficulty in locating answers to his questions.

At the end of the book are fifty-five pages of appendixes giving forms used in the authors' reading clinic, especially their valuable "Interest Inventory"; lists of reading tests (without evaluation); and a list of sources of reading ma-

terials, with a brief comment on each. These are valuable in further explaining the authors' work and point of view.

As said above, this book is a scholarly and capable piece of work which demands the attention of all who are interested in reading problems.

E. W. DOLCH

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THE SCHOOL AS A CO-OPERATIVE ENTERPRISE.—Within the past quarter-century changing concepts of the aims of public education have forced administrative theory and practice steadily in the direction of clearer recognition of the necessity for co-operative endeavor on the part of the schools and other social institutions in the communities that they serve. When the aim of education was mere literacy or the mastery of narrowly defined fields of subject matter, the function of schooling was unique and the school a self-sufficient unit, although inseparable from its community setting. With the gradual broadening of the purposes of education to include preparation for citizenship, the promotion of health, the enjoyment of leisure, and the attainment of social and vocational efficiency, the evolving program of the schools assimilated, in increasing measure, the methods and the endeavors of surrounding institutions and agencies whose interests or functions were visibly identified with the acquired objectives of education. These trends are clearly reflected in the literature of school administration, for the numerous writings pertaining to this aspect of administration during the past ten or fifteen years have assumed the proportions of a special field of study and investigation rather commonly referred to as school and public relations. A particularly good expression of the ideology underlying the community concept of the American public school is presented in one of the later contributions to this field.[1]

The twenty chapters of this book are grouped under five divisional titles. The significant theme of the first division is the historical development of the school organization and the evolving social interest in public education. The several chapters of the second division describe the points of contact of school and community and the media and the agencies available for extending the influence of the school as a social institution. In the third division reference is made to state and national organizations which serve to stimulate and nurture school and community co-operation. The last two divisions deal with problems and policies pertaining to the planning and the administering of public-relations programs to be projected by the schools. The presentation is characterized by effective organization, good style, and aptness of illustration. The impressively comprehensive treatment indicates extensive study and research. Problems are

[1] William A. Yeager, *Home-School-Community Relations: A Textbook in the Theory and Practice of Public School Relations*. Pittsburgh, Pennsylvania: University Book Store, University of Pittsburgh, 1939. Pp. xxii+524.

identified specifically, and remedial and constructive procedures are outlined in appropriate connections.

The basic concept of the author's program of school and community relations is expressed in the following quotation from the Preface:

> This text then recognizes the total educational and social pattern of living present in any community. The home, the school, the church, clubs and recreation centers, and all agencies and institutions of any community are conceived collectively as dominating influences in the life of the child educationally. The public school has been placed in a central position of leadership and direction, in order that the educational influencing situation of the others may be properly co-ordinated, *which is its primary duty to perform* [p. x].

This concept consistently motivates the discussion and proposals throughout the book, but there is a conspicuous omission of local governmental agencies from the author's inclusive category of "all agencies and institutions of any community." In his numerous effective pleadings for co-operation on the part of all agencies concerned with the educational and social welfare of the child, there is a studied avoidance of reference to the indispensable services of the departments of municipal government which are concerned with such vital factors in the education of the child as health, recreation, safety, and social welfare. It is conceded that, when the parents are not able to safeguard properly their children from the pitfalls of delinquency and crime, "the help of probation officers, the courts and institutional and other agencies is useful" (p. 290), but the examples of school and community co-operation which are cited do not include the notable instances of effective co-operation between school and municipal departments. In so careful a delineation of the numerous lines of possible co-operation between the schools and organized community life, it is disappointing to the reader and unfortunate for education that essential functions and many valuable contributions of municipal government are slightingly regarded.

NELSON B. HENRY

University of Chicago

AN INTEGRATION OF PROGRESSIVE THEORIES.—For a generation discontent with educational traditionalism has definitely expressed itself in attempts to formulate a better teaching procedure for American public schools. Since 1917 the Lincoln School of Teachers College, Columbia University, has contributed its influence to the forces of educational reform. Now that this school has come of age, its principal, Lester Dix, has decided to celebrate the event with an analysis of the practices of the school and the formulation of a program for the future. Indeed his book[1] offers a program designed to show the way for progressive education in general.

A glance at the chapter headings will show the reader the general direction

[1] Lester Dix, *A Charter for Progressive Education*. New York: Teachers College, Columbia University, 1939. Pp. 108. $1.60.

of the author's thought: "A Progressive School Comes of Age," "The Fundamental Outlook," "A Modern Conception of Learning," "Education for American Democracy," "Principles Underlying an American Curriculum," "Current Curriculum Trends," "A Plan for the Emerging Curriculum," "A Plan for Curriculum Building and Teaching," "Resources for Curriculum Building and Teaching," "Scheduling a Modern Program," "A School Program for Teachers Colleges," and "A Strategy for Progressive Education."

On a scale of general social attitude, beginning at the right with the conservative defenders of the *status quo* and passing through liberalism to the region of radicalism on the left, one finds the term "progressive" used for everything from a timid departure from the traditional to a reckless disregard of the values of past experience. In other words, the range covered by the term does not permit the definitive location of an individual, group, or theory to which it is applied. In his effort to unify progressive ideology, Dix therefore confronted the problem of defining a particular outlook and describing the elements that seem consistently to belong therein. He begins, appropriately, with basic assumptions and ends with a plan for the school curriculum of tomorrow.

Philosophies of education and of life show their most irreconcilable differences in the presuppositions with which they start. The plan of education outlined in this book is built on a philosophy that is relative, experimental, operational, creative, and individualistic. The adoption of this philosophy means that knowledge of the external world is regarded as tentative; that it is arrived at by trial reactions; that the ideational units of knowledge are, in essence, plans of action; that the content or subject matter of knowledge is the product of this activity; and that respect for individuality is the first principle of education, as it is of democracy. A complete discussion of these basic assumptions would require a treatise on pragmatism and alternative philosophies. Suffice it to say that the author, in his proposed charter, has not permitted his interest in the personality-centered curriculum and individual values to obscure the importance of subject matter. He favors a "directly functional curriculum," which takes its point of departure in individual needs and aims at the continuous development of pupil experience in the direction of the highest achievements, or values, in the humanities and in the natural and social sciences (see chart on page 62). Such a curriculum, as the author suggests, is designed to preserve the "important gains of the society-centered plan" and at the same time provide "a planned curricular area of individual development" (p. 55).

The reviewer believes with the author that such a plan "would most certainly represent a larger view of the total educational problem" (p. 55). One may refer to the theory as bipolar in character.

The value of this publication lies in its suggestive value for those who have turned their backs on the traditional school and are seeking a progressive and consistent approach to better things.

FREDERICK S. BREED

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A USEFUL REVISION OF A USEFUL BOOK.—The second edition of Chenoweth and Selkirk's textbook[1] continues to maintain the standards of excellence set by its predecessor. Its value has been enhanced, moreover, by the addition of two chapters, one dealing with the sanitation of the school and the other with the teaching of health. Several new illustrations in the chapters on sight and on the physical examination of children also add to the attractiveness of this edition. Of value also is the material found in the Appendix on quarantine regulations and reading disability.

The scope of the book is such as to serve the needs of all school health workers —teachers, nurses, dentists, and physicians. It has been written primarily for the purpose of giving a scientific basis for school health work. It incorporates, however, many suggestions which touch primarily on the educational aspects of the school health program. In many respects the book is a veritable encyclopedia of information for the person wishing to make a careful study of school health problems. Of especial value to the student are the references for further study found at the close of each chapter. The person without scientific training will also find helpful the glossary at the back of the book.

The publication is to be especially recommended for students engaged in securing graduate training in school health education. There is available today no other textbook which describes so adequately the health-service activities engaged in by school health workers. The value of this book lies in its scientific accuracy and adherence to principles long recognized as sound by leading school health authorities.

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A TEXTBOOK IN SCIENCE FOR THE JUNIOR HIGH SCHOOL.—Beauchamp, Mayfield, and West's new book[2] is designed primarily as the third book in a series of three for use in Grades VII, VIII, and IX. It does not replace the textbook by Pieper and Beauchamp written for the first year of the high school, although it might be used in the high school in a community in which the elementary schools use Books I and II or have a well-organized science curriculum.

The book is organized on the unit plan—a plan of which the authors in previous books have proved themselves to be masters. The first three units deal largely with plants and animals. Because of the interest of both boys and

[1] Laurence B. Chenoweth and Theodore K. Selkirk, *School Health Problems*. With a Chapter on School Health Administration by Richard Arthur Bolt. New York: F. S. Crofts & Co., 1940 (second edition). Pp. xii+420. $3.00.

[2] Wilbur L. Beauchamp, John C. Mayfield, and Joe Young West, *Science Problems for the Junior High School*, Book III. Chicago: Scott, Foresman & Co., 1939. Pp. x+756. $1.68.

girls in these subjects and because of the pupils' previous experience with them, these topics serve as a good beginning in the study of general science.

Throughout the book frequent examples taken from the common experiences of boys and girls are used in introducing new subjects. Important, too, is the recognition of the value of the historical approach to new fields.

The book is well illustrated with up-to-date pictures and drawings; in fact, there are few pages that do not have at least one illustration. The use of pictures of pupils performing simple experiments is to be commended.

One of the most important features of the book is the method of approach to scientific principles. The authors attempt (1) to lead the pupil to see the importance of supporting evidence and orderly approach to generalizations and (2) to develop in the pupils some elements of the scientific method by constant use of examples.

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